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United States  
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Economic  
Research  
Service

January 1988

# Outlook '88 Charts

64th Annual Agricultural  
Outlook Conference





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64th Annual Agricultural  
Outlook Conference



*Material in this document was presented at the 64th Annual Agricultural Outlook Conference, December 1-3, 1987, U.S. Department of Agriculture, Washington, D.C.*

The black and white reproducible charts and tables included here were originally presented as color slides before the Outlook Conference. This publication does not include all visuals used at the Conference, because not all speakers used slides or provided material for this compilation.

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## Farm Finance Outlook

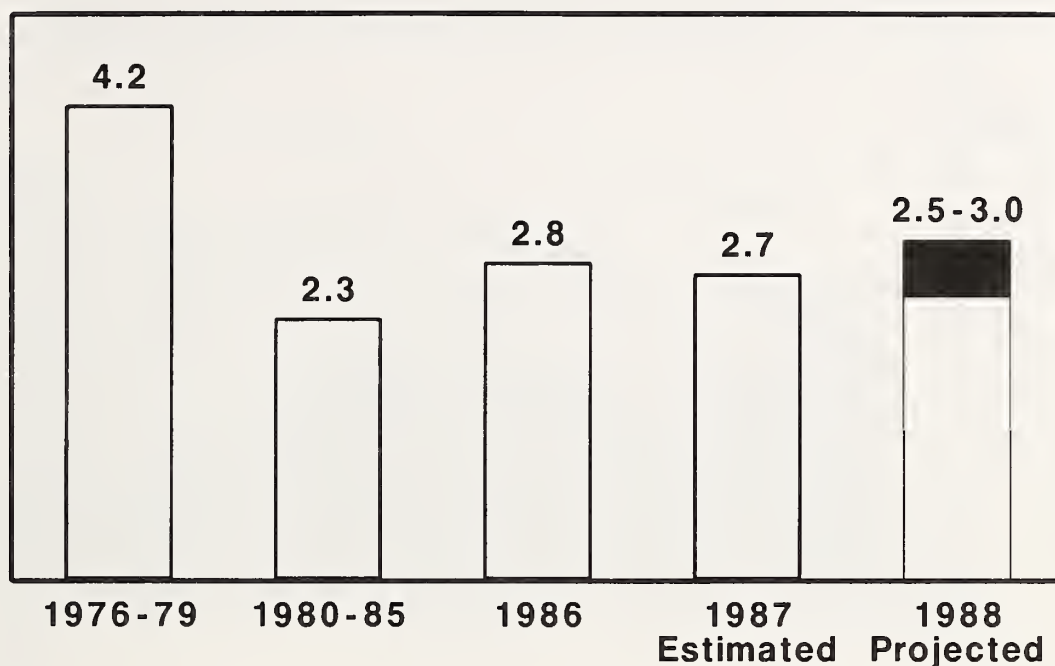
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## World Economic Growth Rates Percent



## Exports as a Share of Total U.S. Crop Use

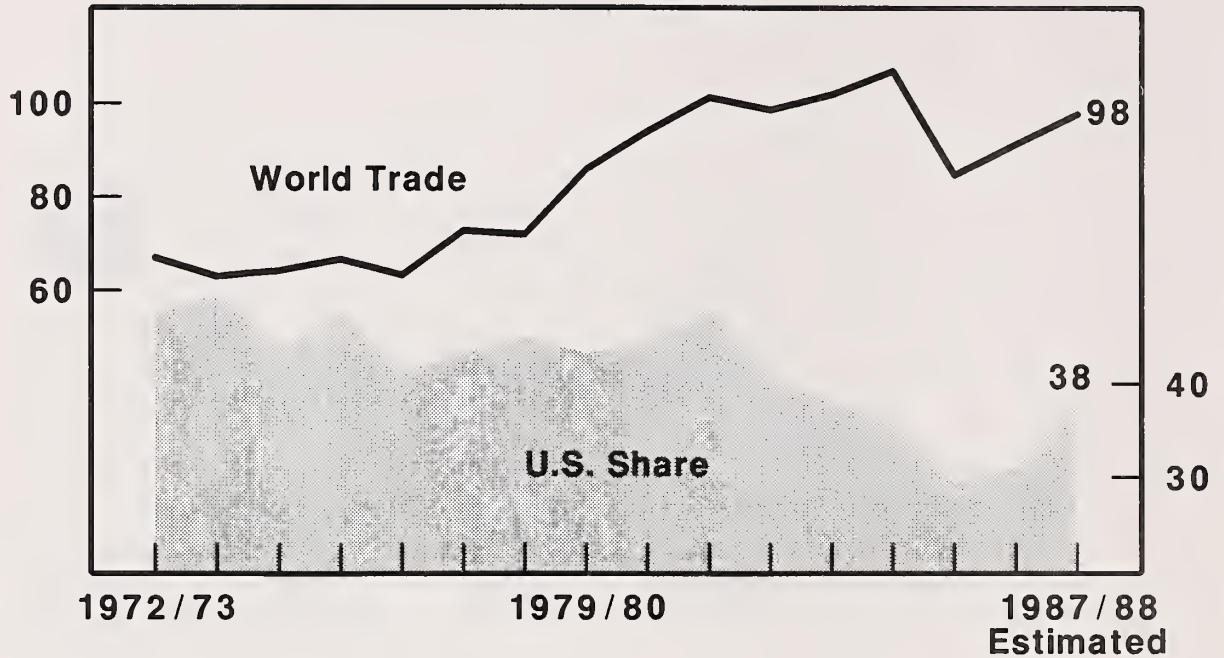
	1970 / 71	1979 / 80	1985 / 86	1987 / 88
	Percent of Total Use			

Cotton	32	59	23	48
Soybeans	50	58	53	51
Rice	53	60	47	51
Wheat	49	64	47	53
Feed Grains	12	31	18	22

# World Wheat Trade

Million Metric Tons

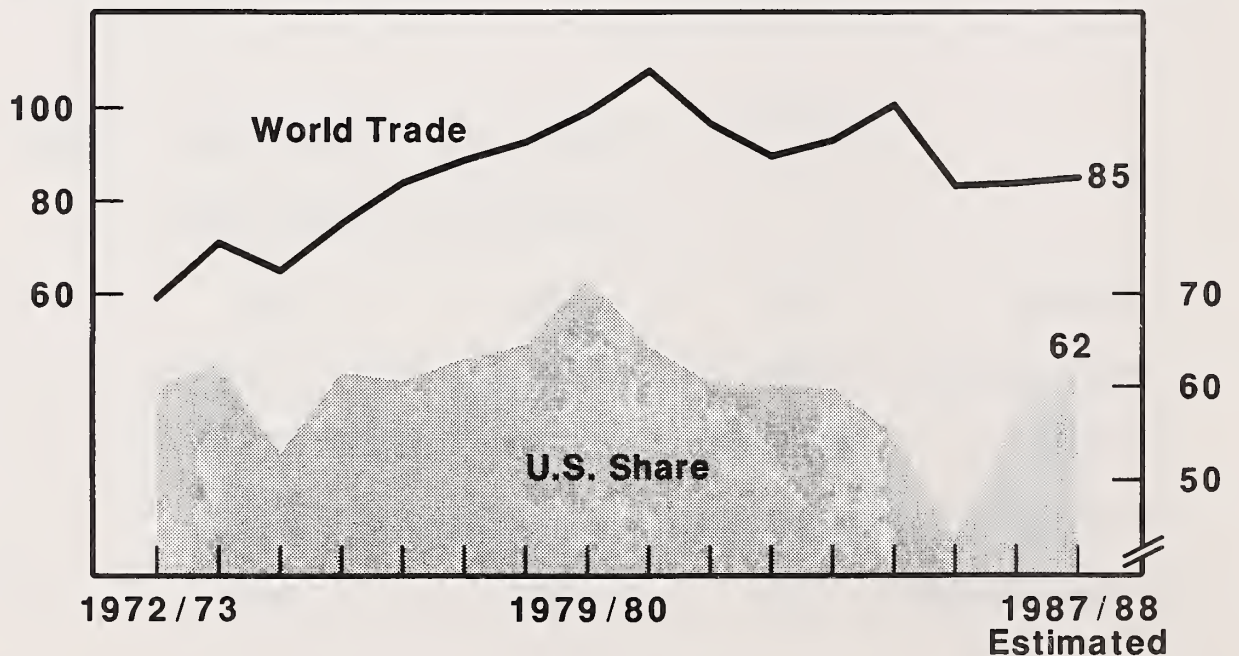
Percent



# World Feed Grain Trade

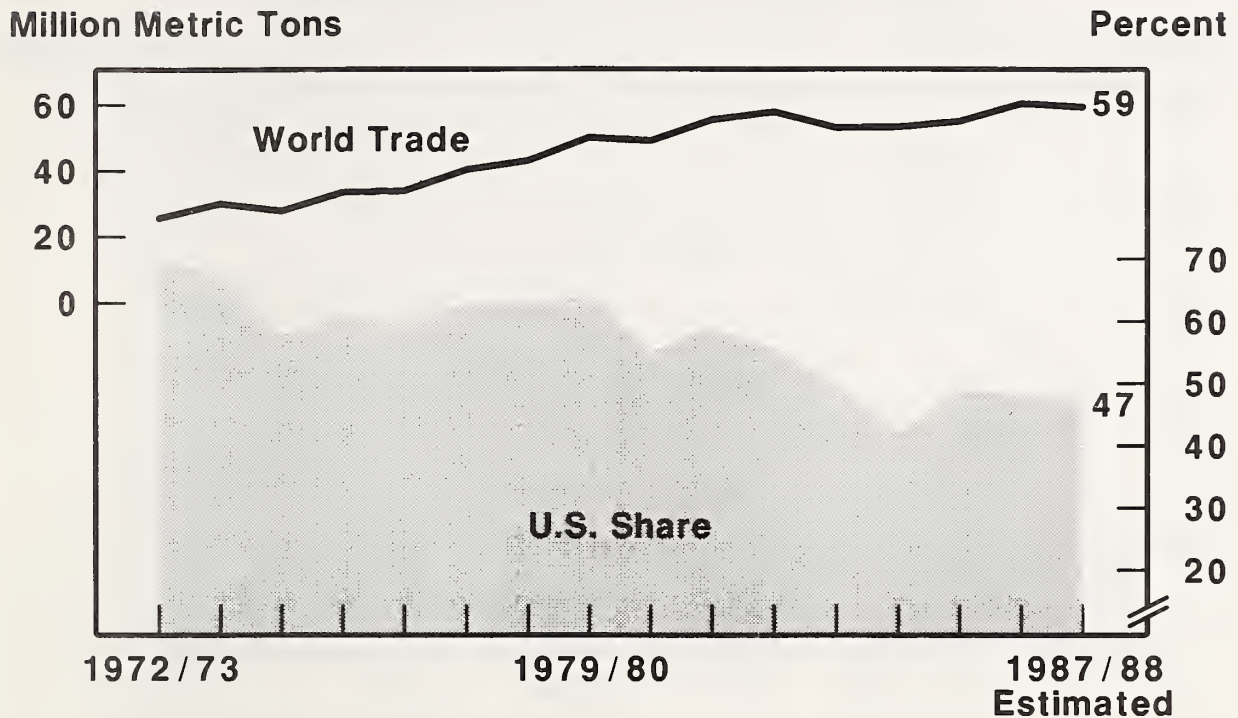
Million Metric Tons

Percent

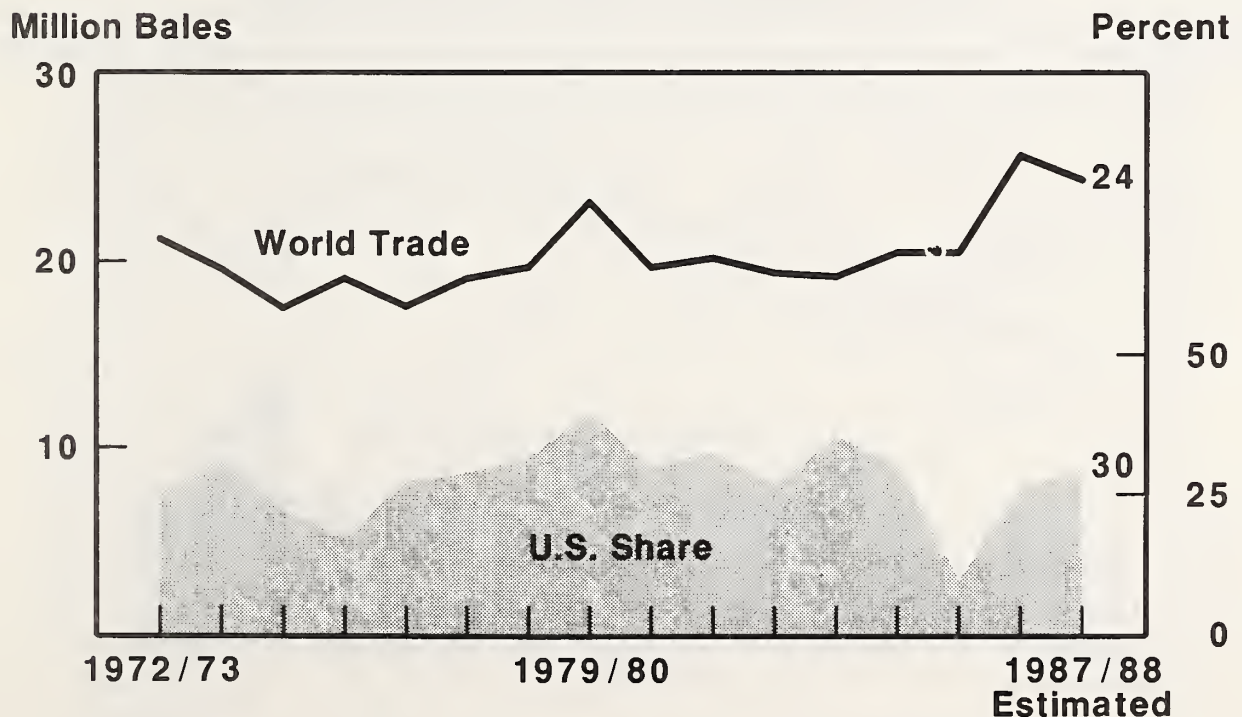




# World Soybean Trade

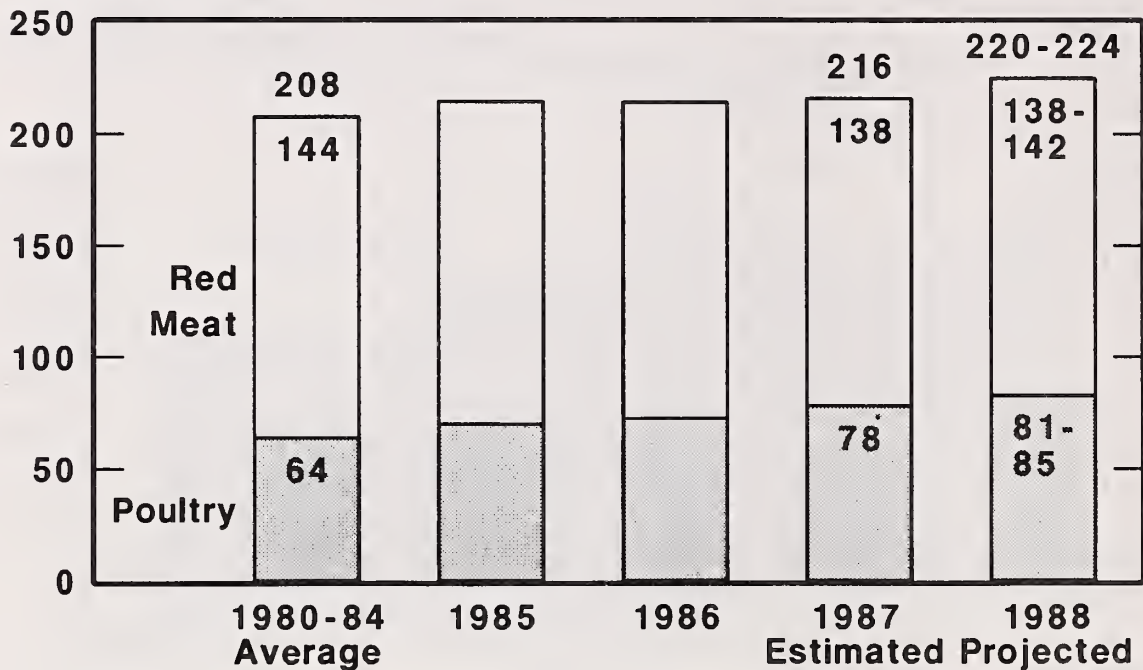


# World Cotton Trade



# U.S. Per Capita Meat Consumption

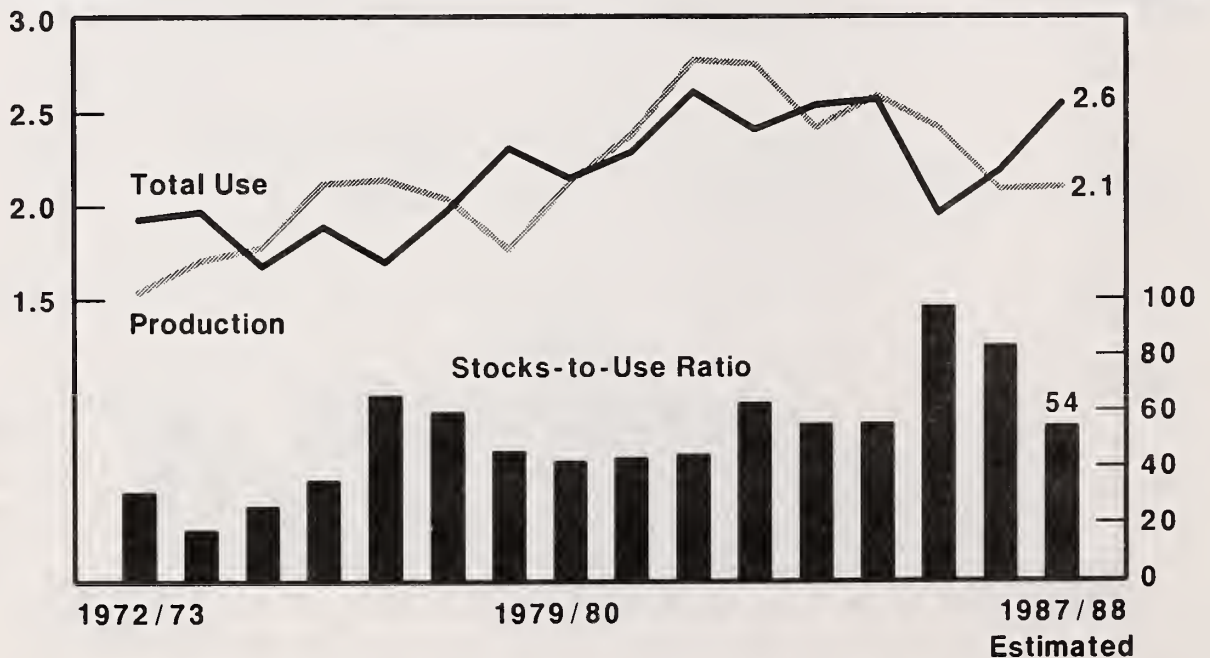
Pounds Per Capita



## Total U.S. Wheat Production, Use and Stocks-to-Use Ratio

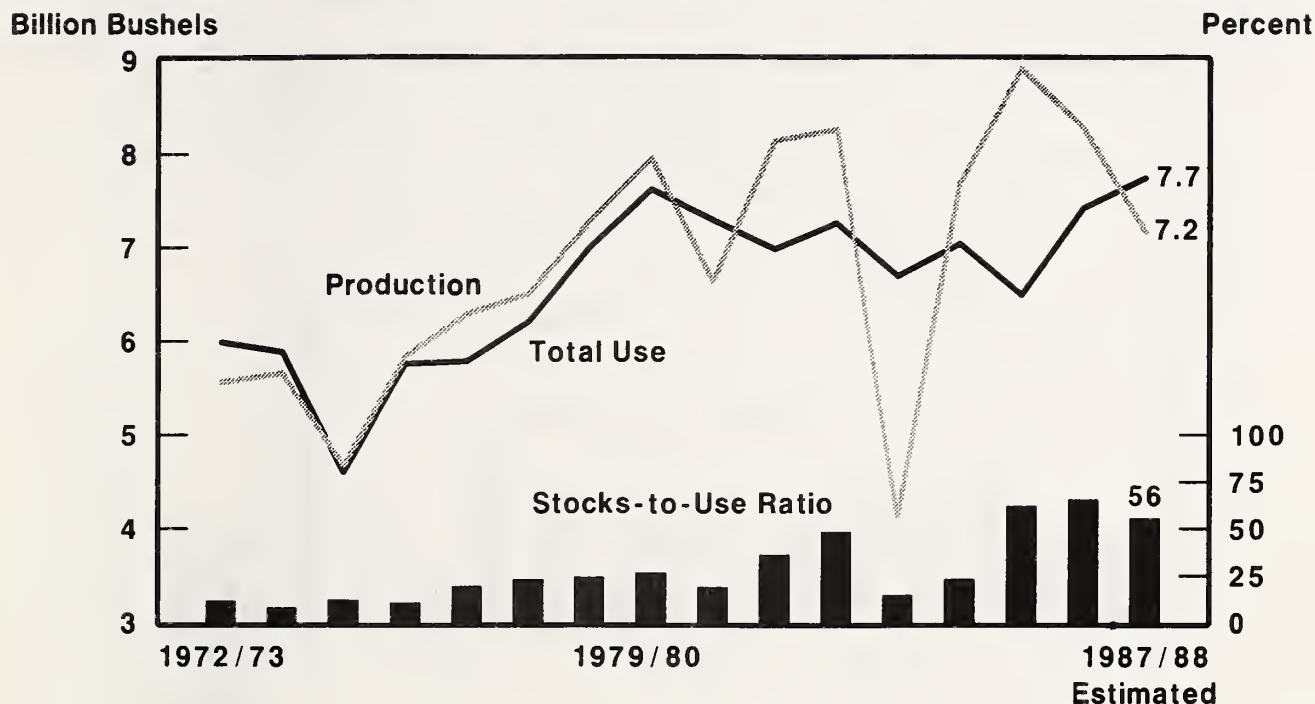
Billion Bushels

Percent

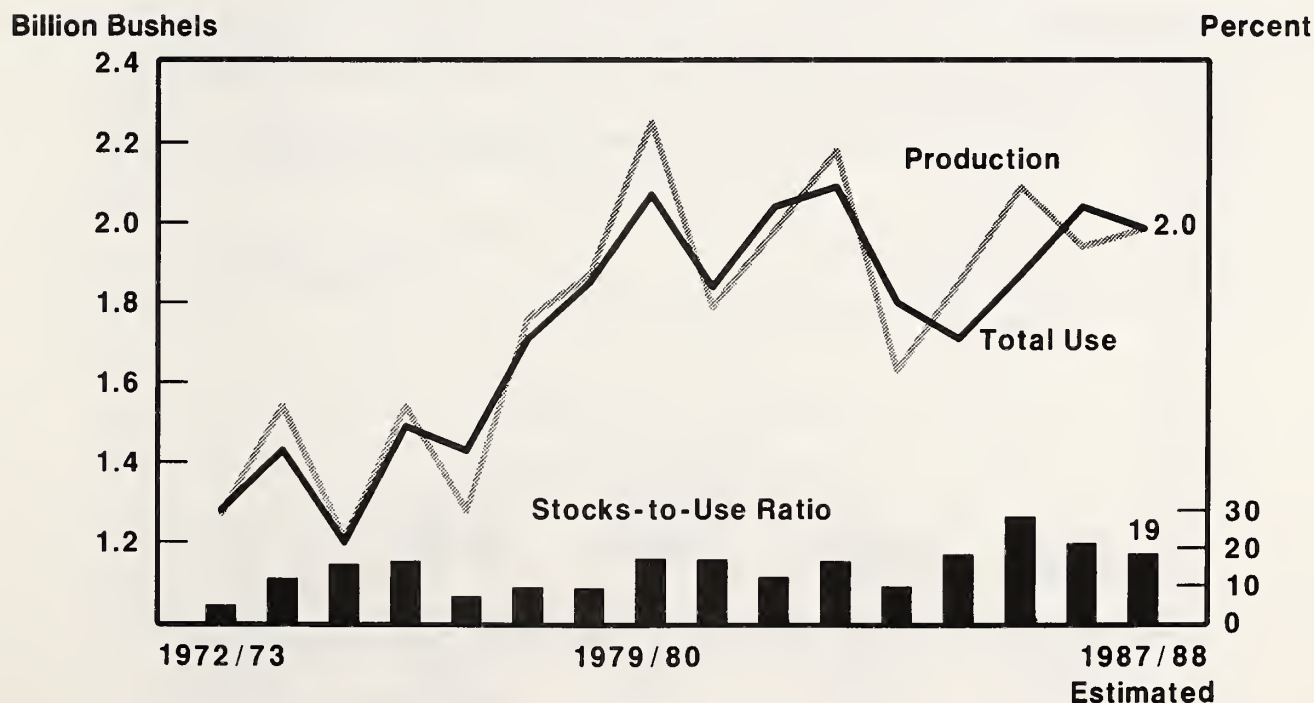




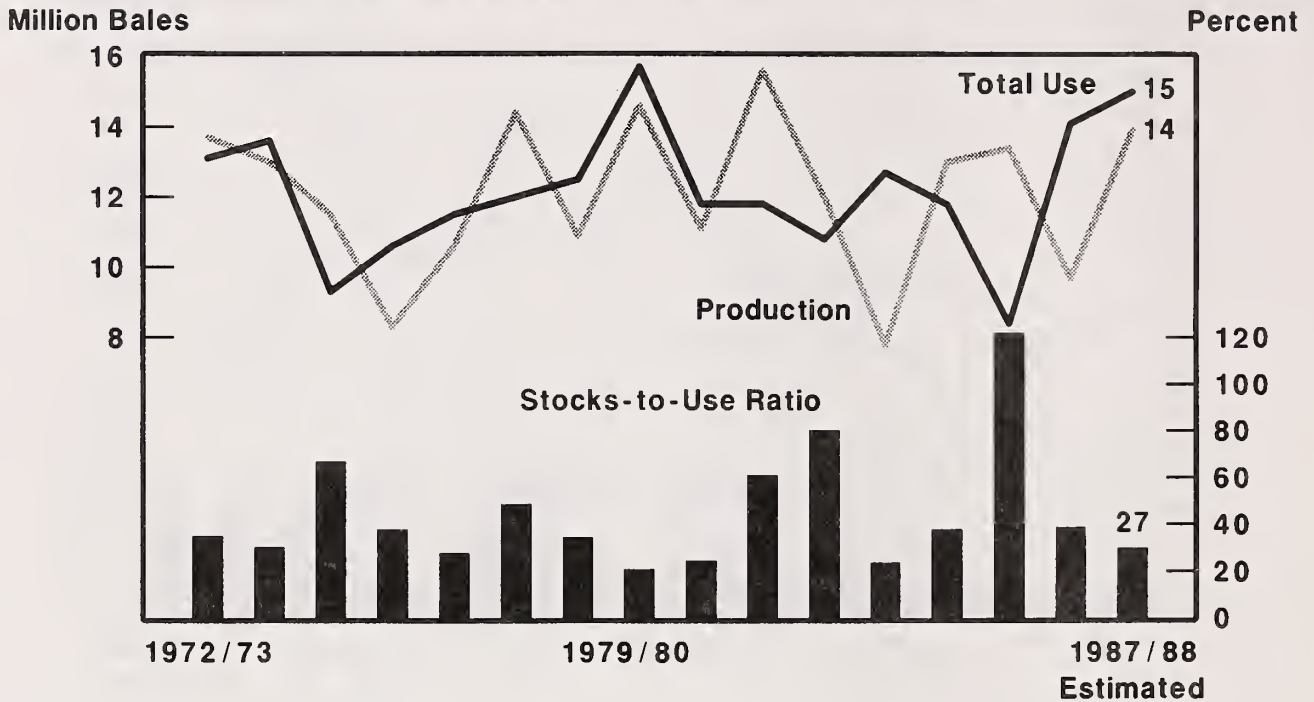
# Total U.S. Corn Production, Use and Stocks-to-Use Ratio



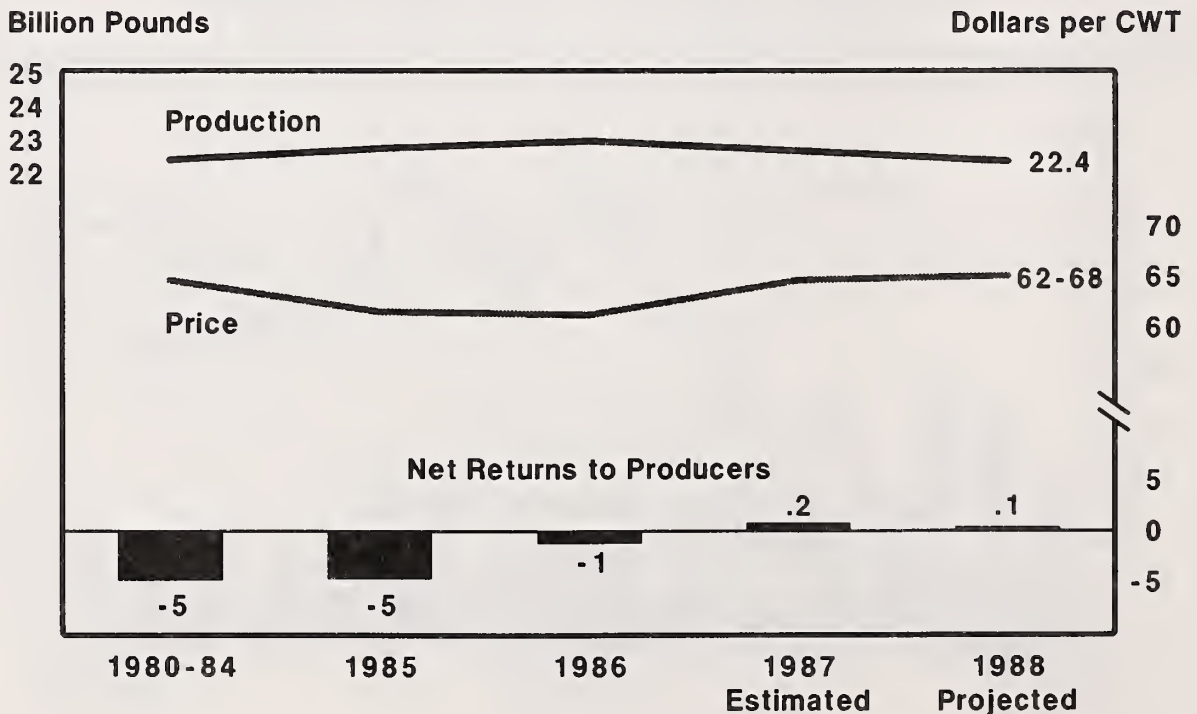
# Total U.S. Soybean Production, Use and Stocks-to-Use Ratio



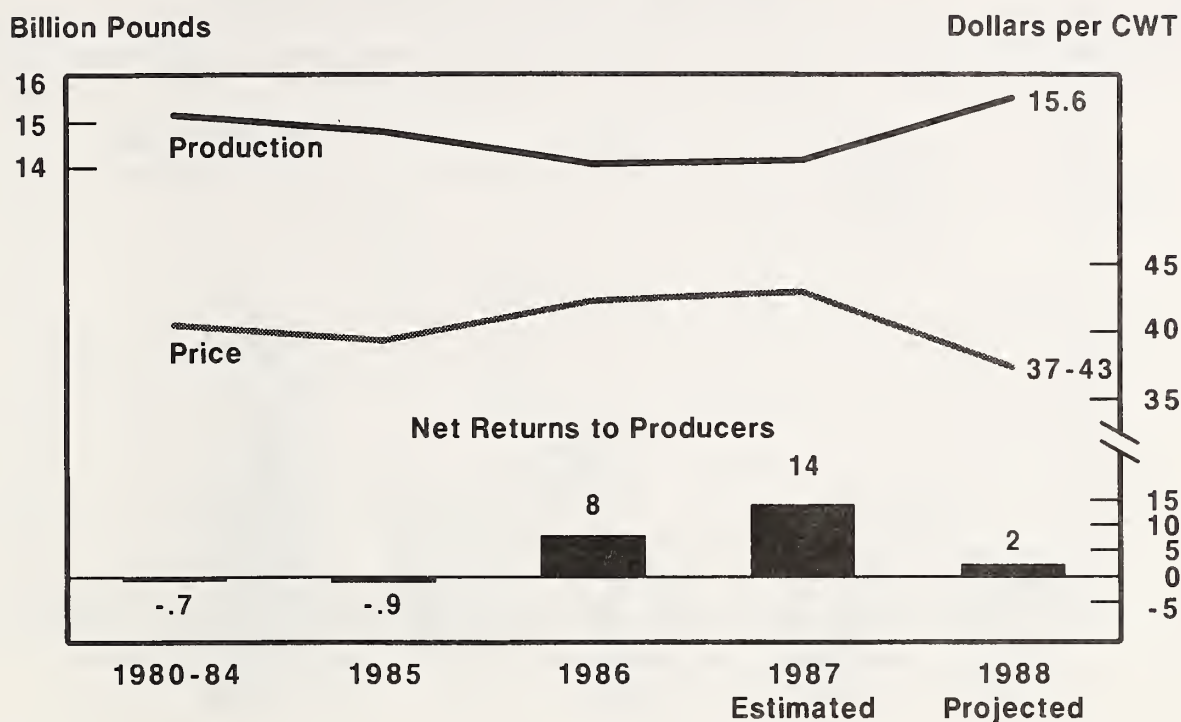
# Total U.S. Cotton Production, Use and Stocks-to-Use Ratio



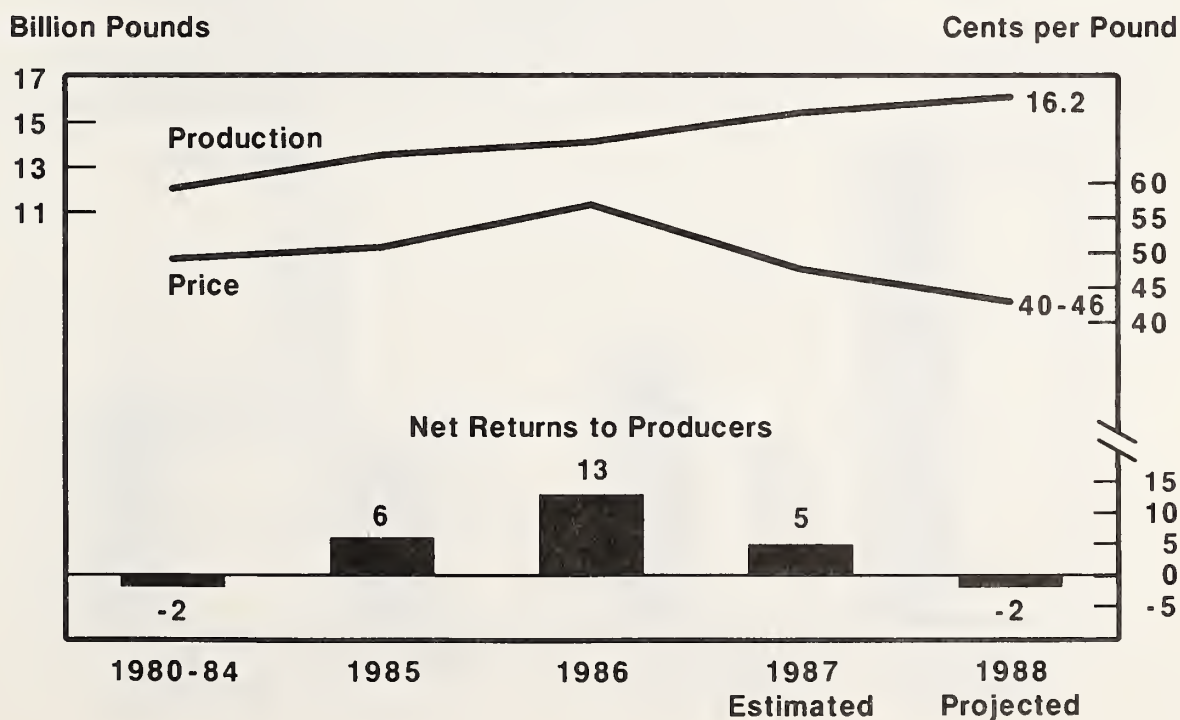
# Beef Production, Prices and Returns



# Pork Production, Prices and Returns

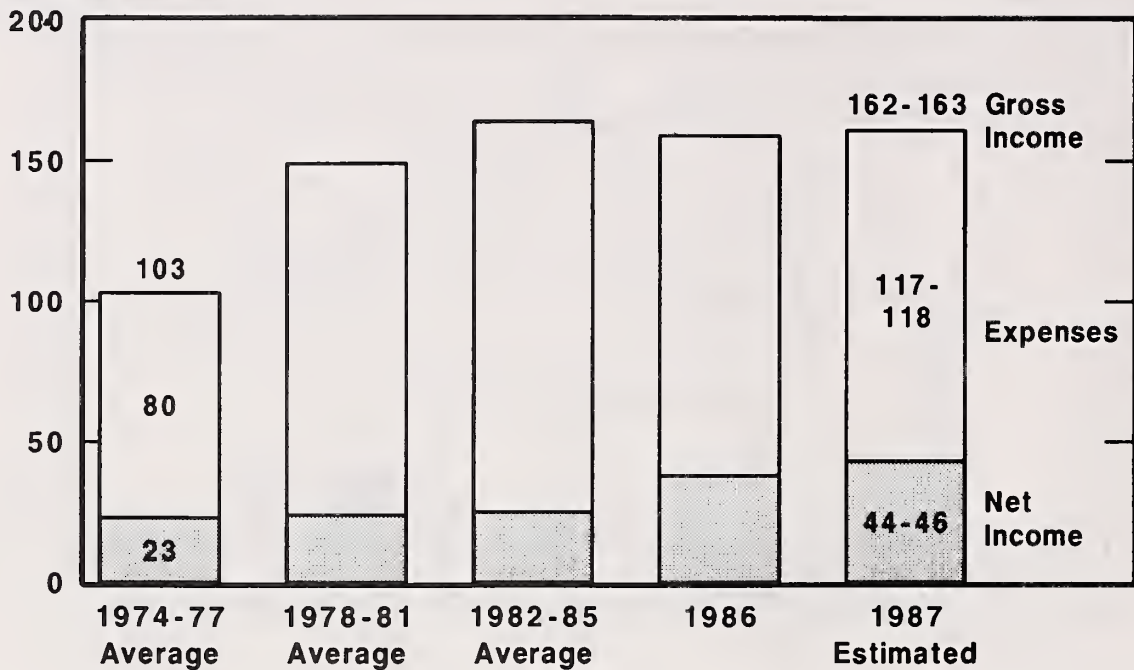


# Broiler Production, Prices and Returns

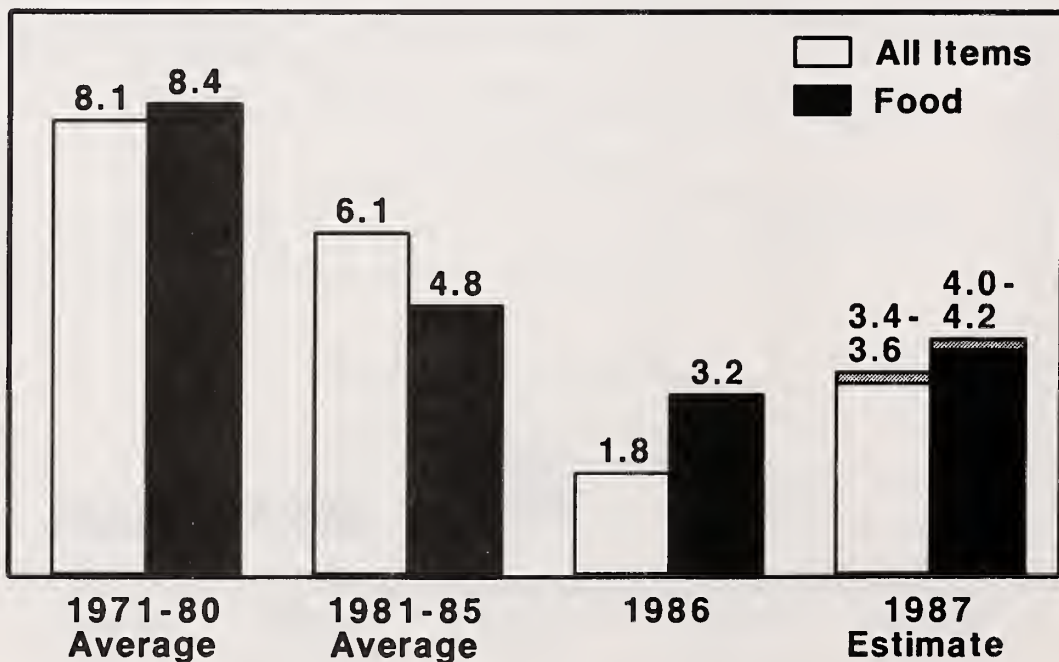


# Net Farm Income

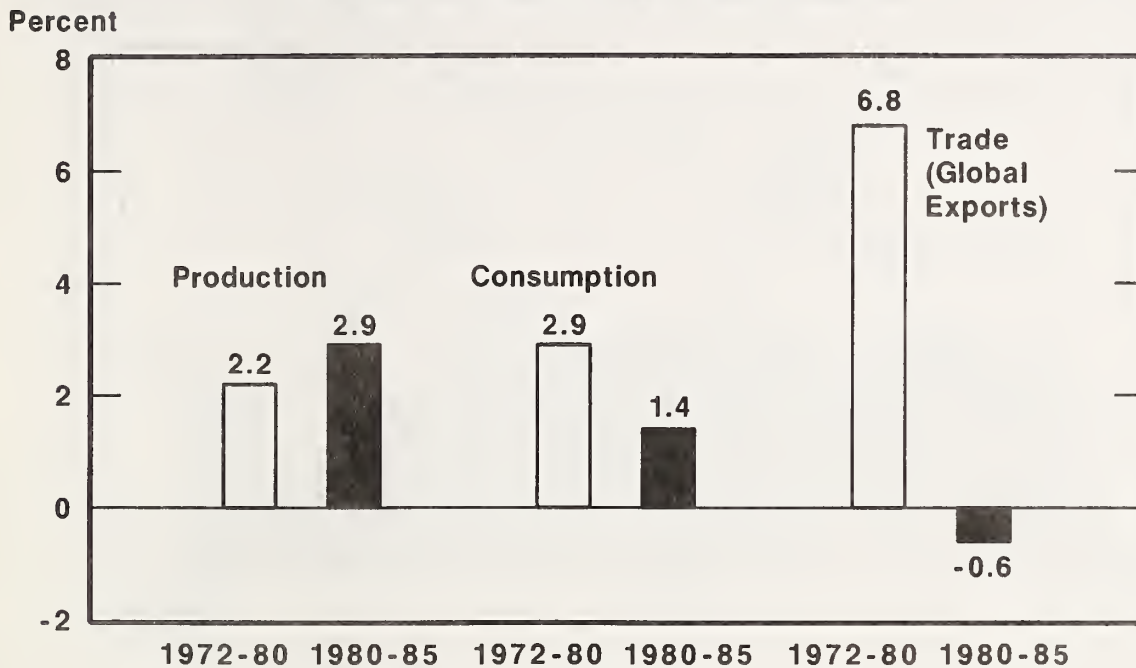
Billion Dollars



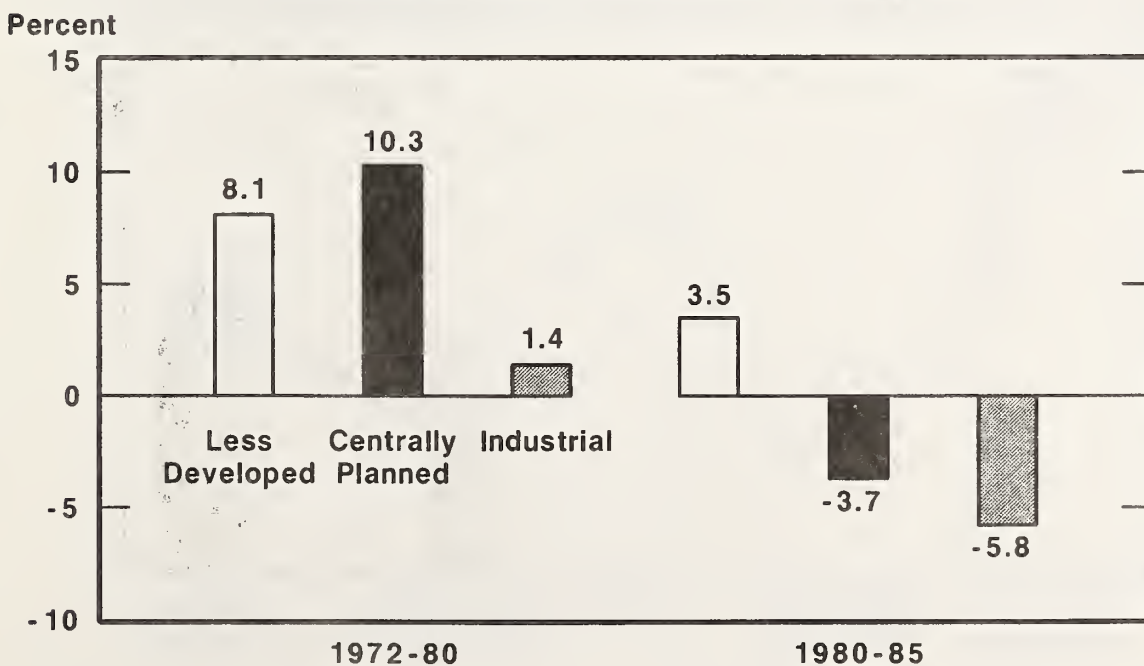
## Changes in Consumer Price Indexes Percent



# Annual Changes in Crop Production and Demand Abroad

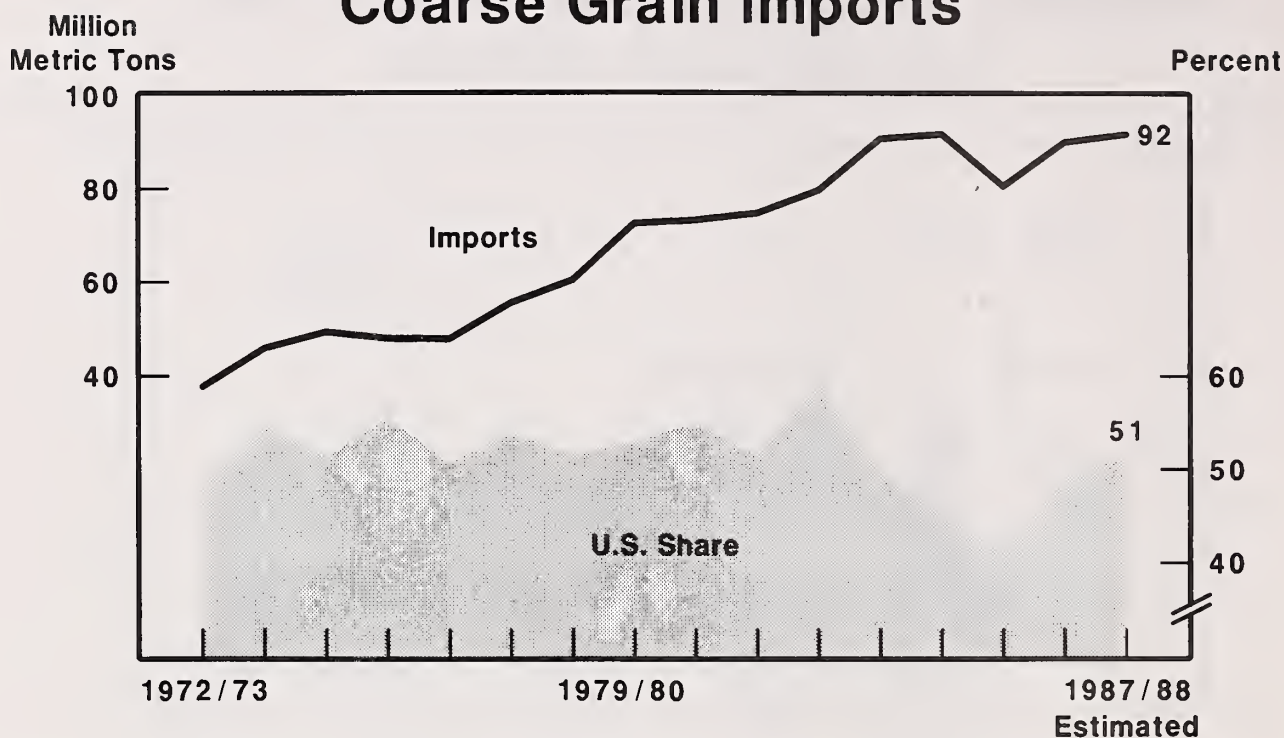


## Grain Import Growth Rates Aboard Wheat and Feed Grains

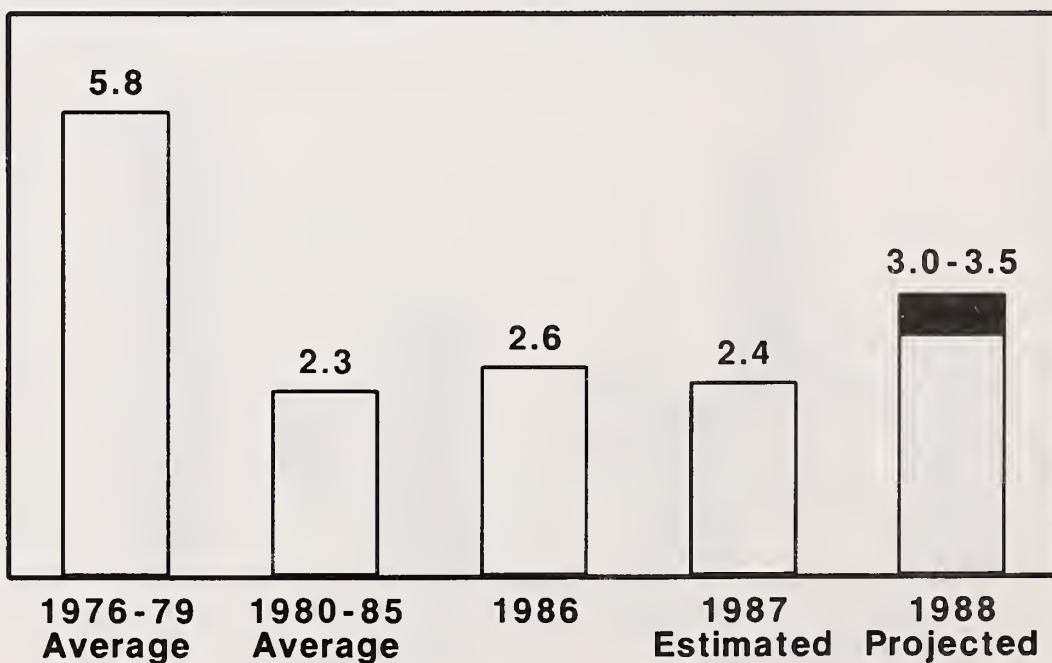




# Developing Countries: Wheat and Coarse Grain Imports



## Economic Growth Rates, Developing Countries

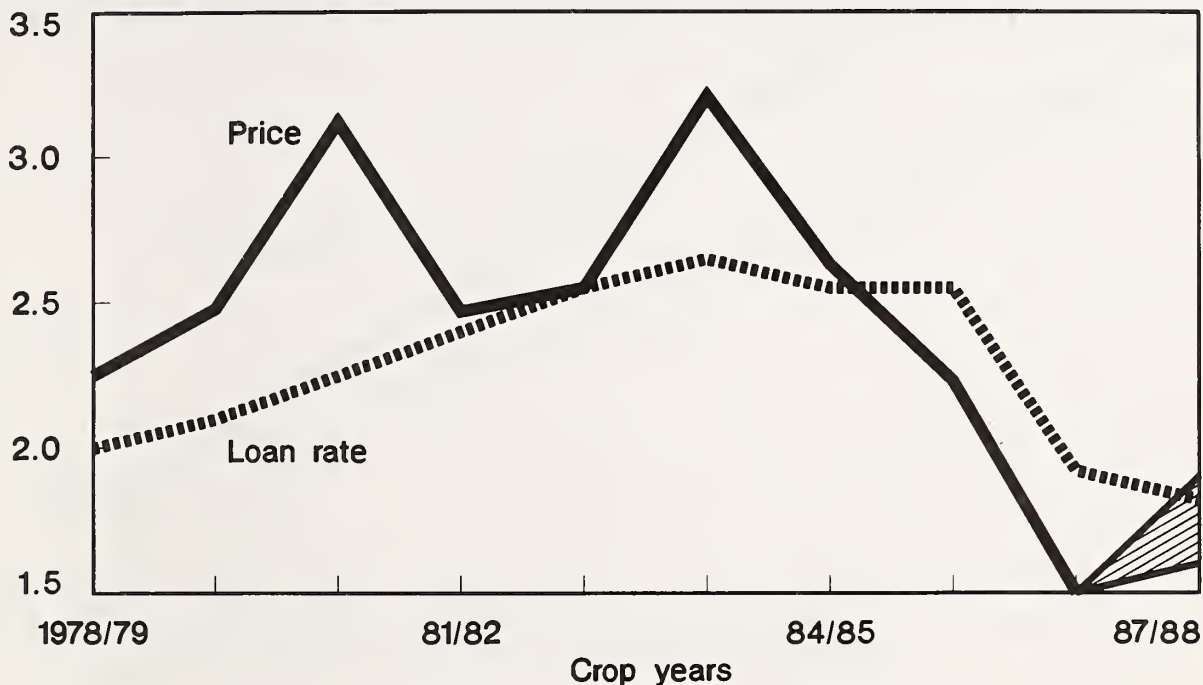






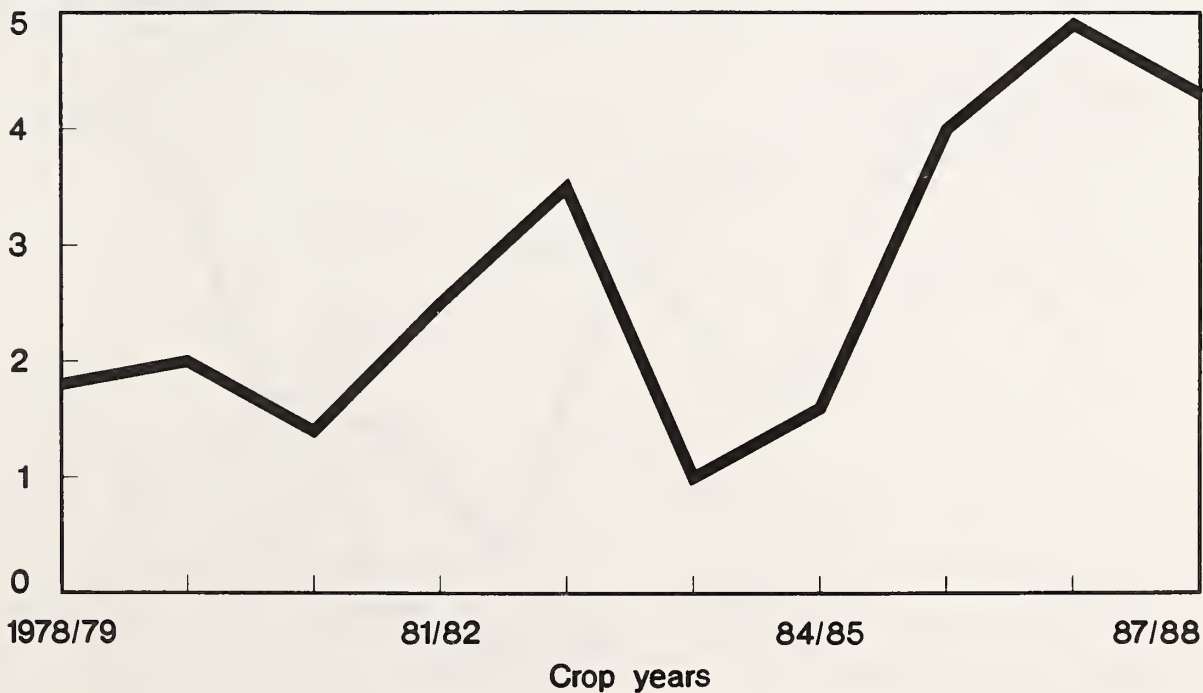
## Corn: Average Farm Price and Loan Rate

\$ per bushel



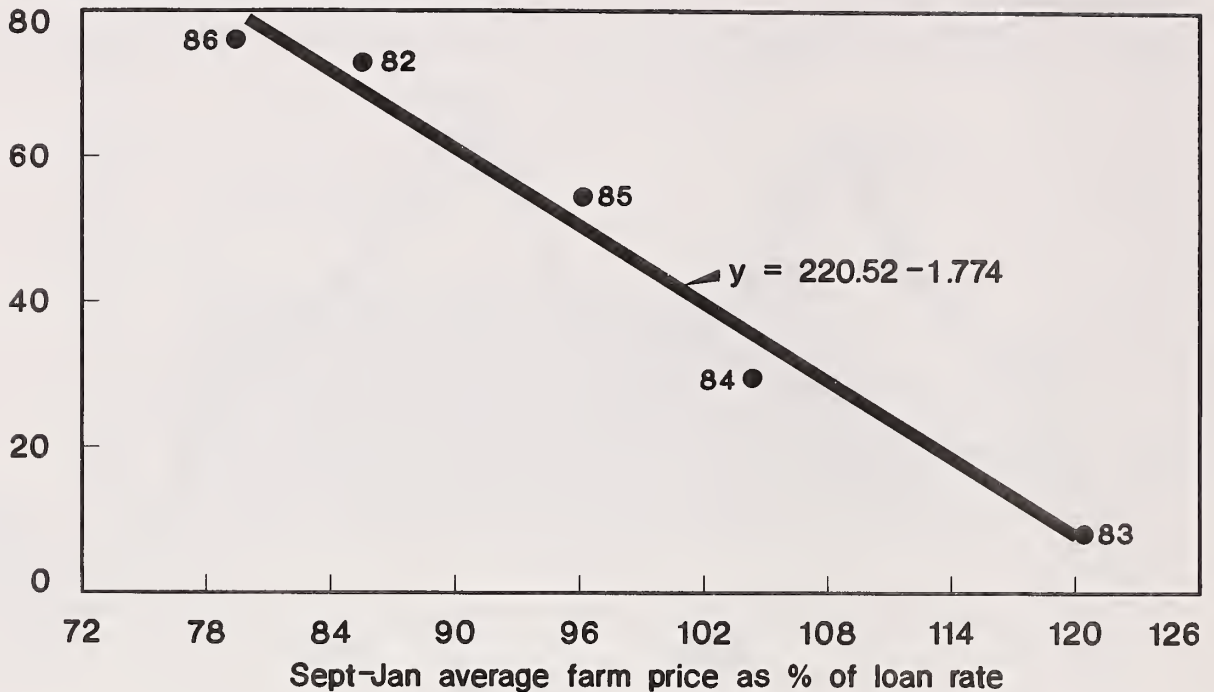
## Corn Carryover Stocks

Billion bushels



## Farm Prices, Loan Rate, and Loan Placements

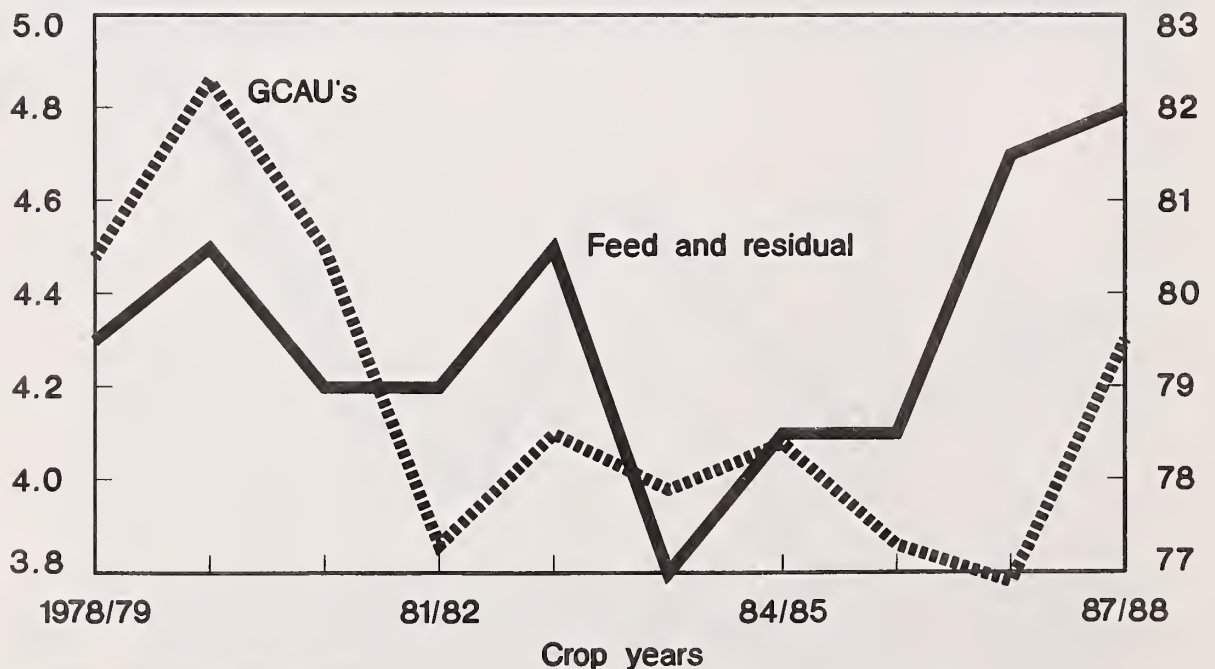
% of eligible crop put under loan



## Feed and Residual Use of Corn and GCAU's\*

Billion bushels

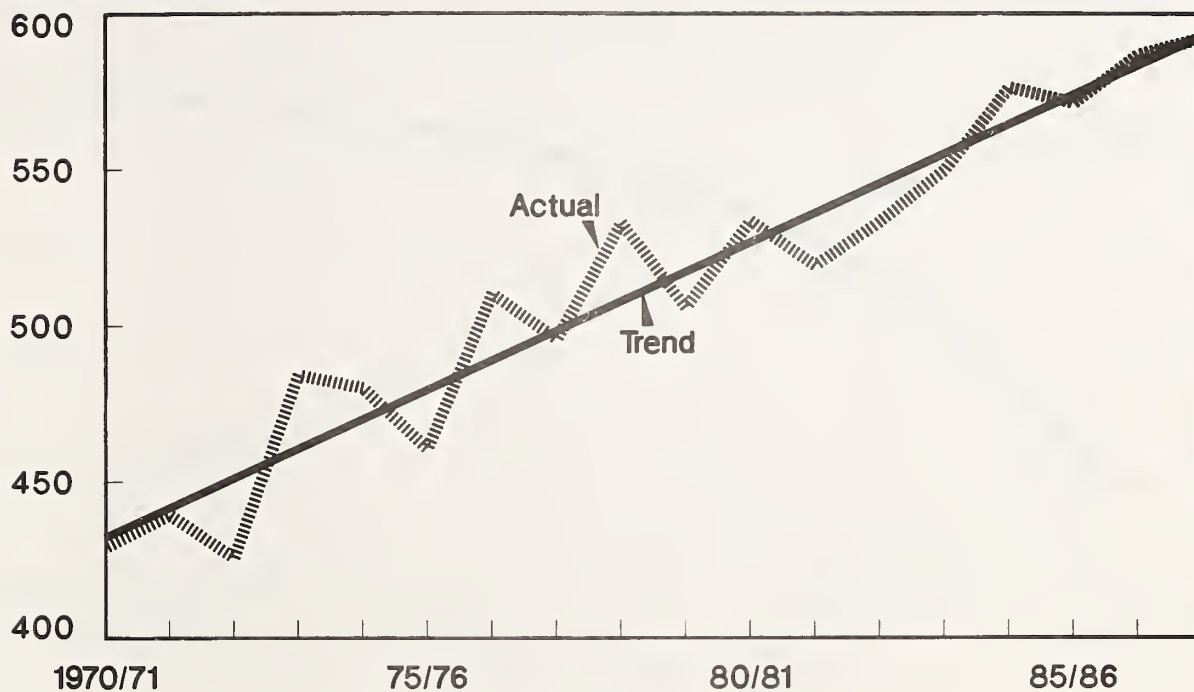
Million units



\* Grain consuming animal units.

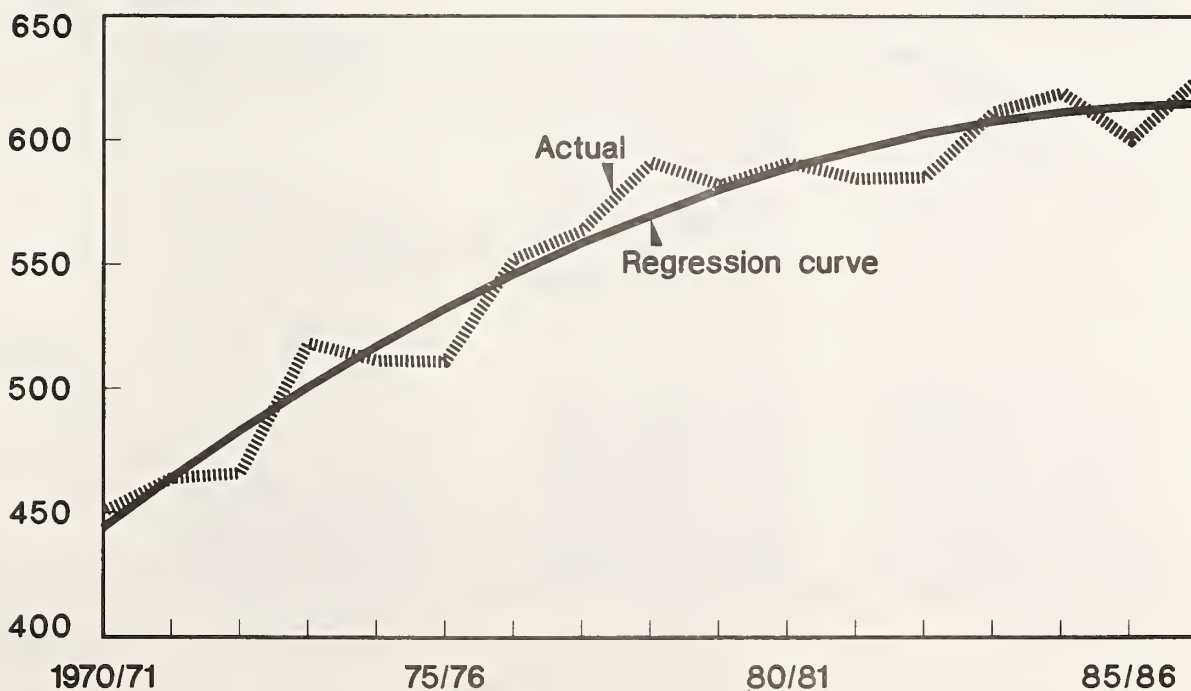
## Foreign Coarse Grain Production

Million metric tons



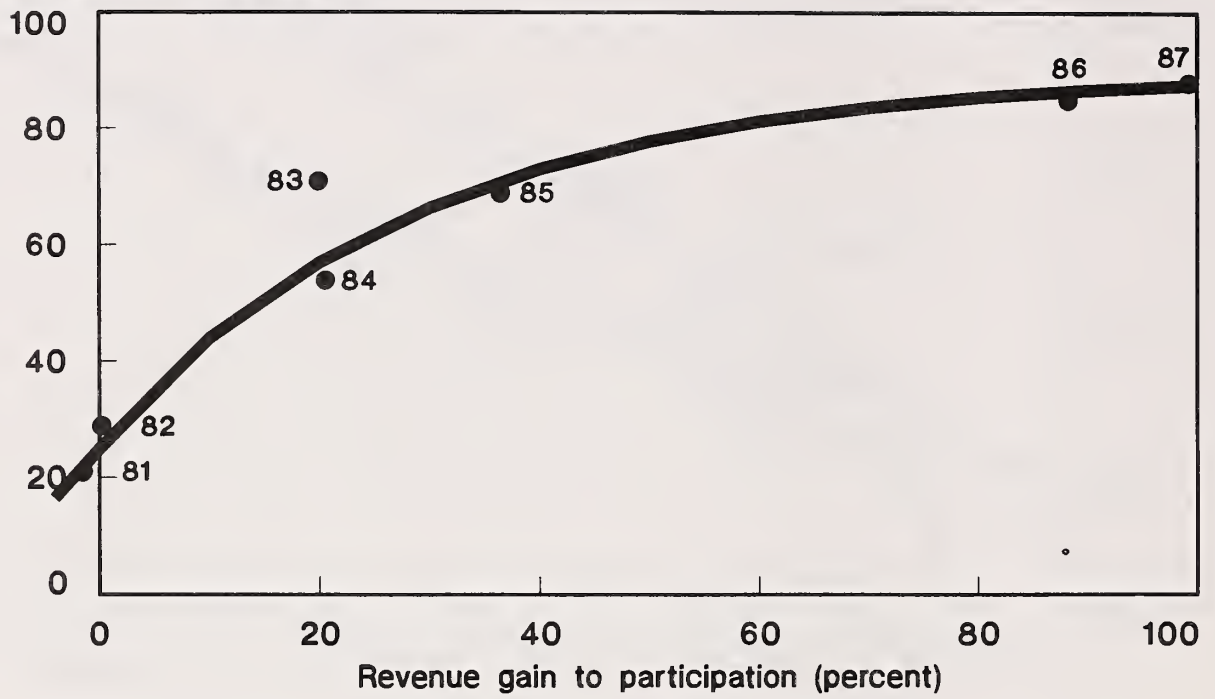
## Foreign Coarse Grain Use

Million metric tons



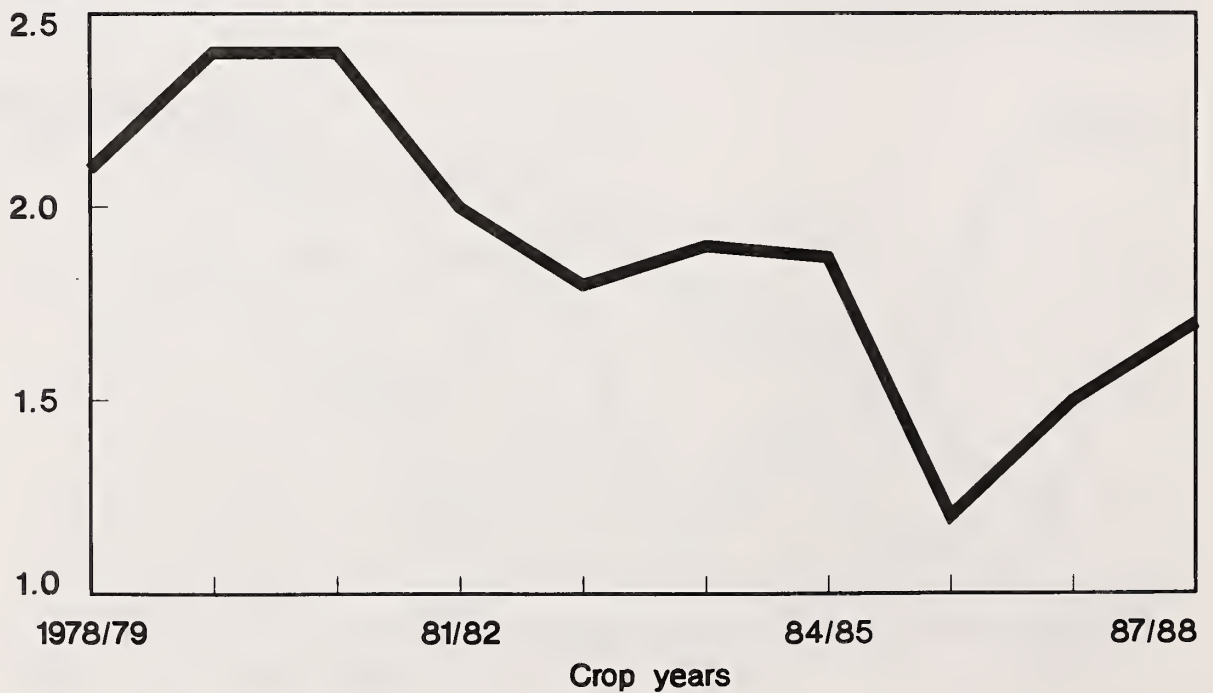
## Program Participation

Participation rate (percent)



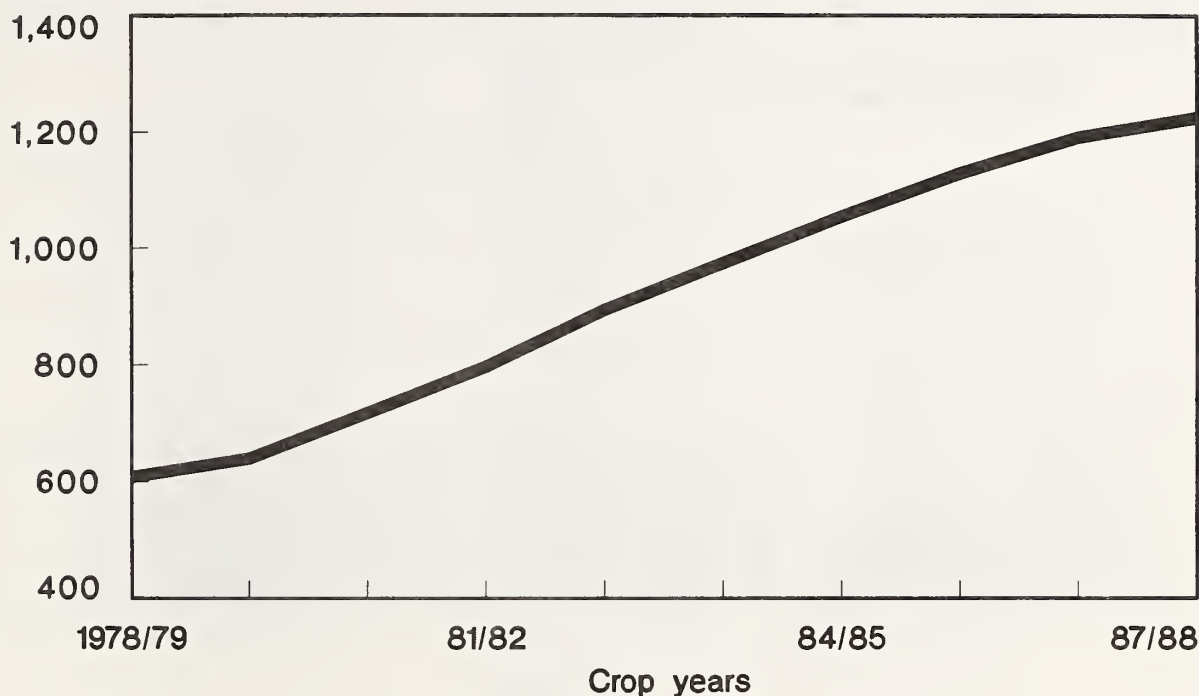
## U.S. Corn Exports

Billion bushels



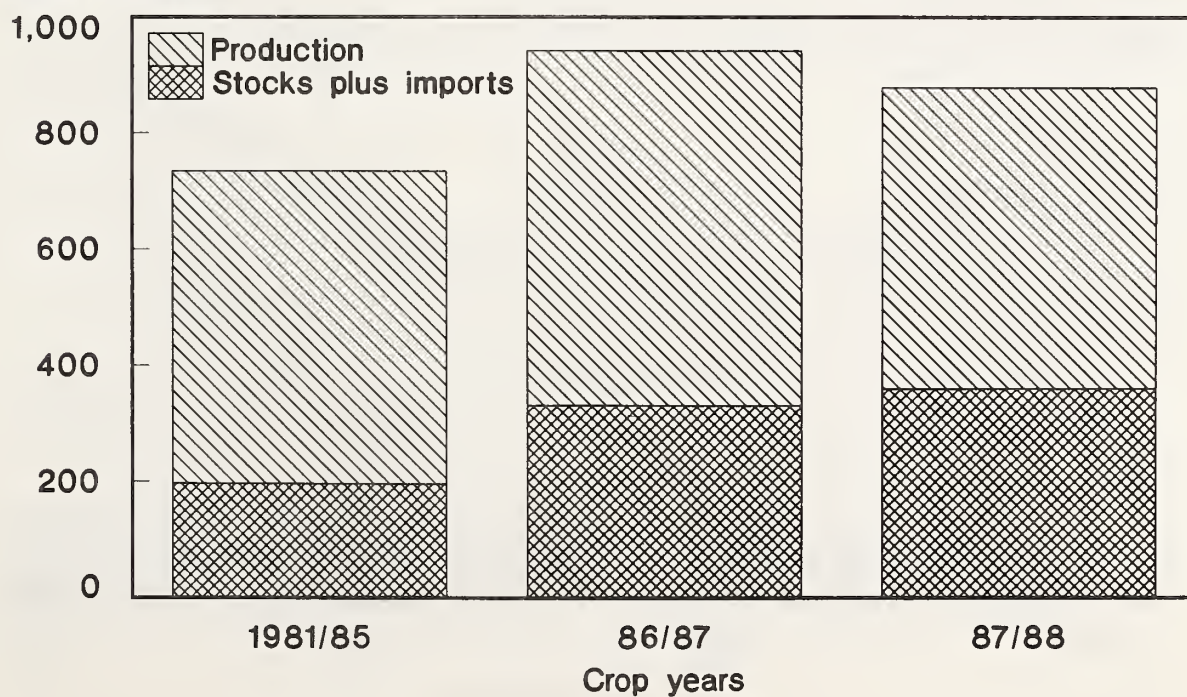
## U.S. Food, Seed, and Industrial Use of Corn

Million bushels



## U.S. Barley Supply

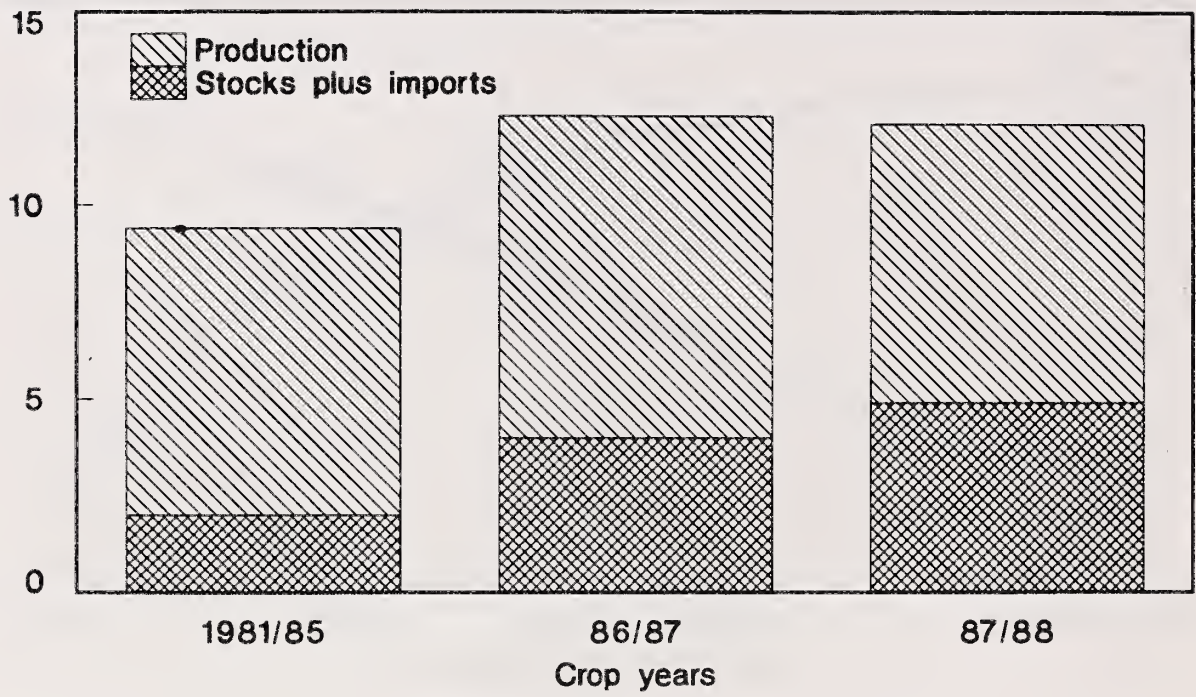
Million bushels





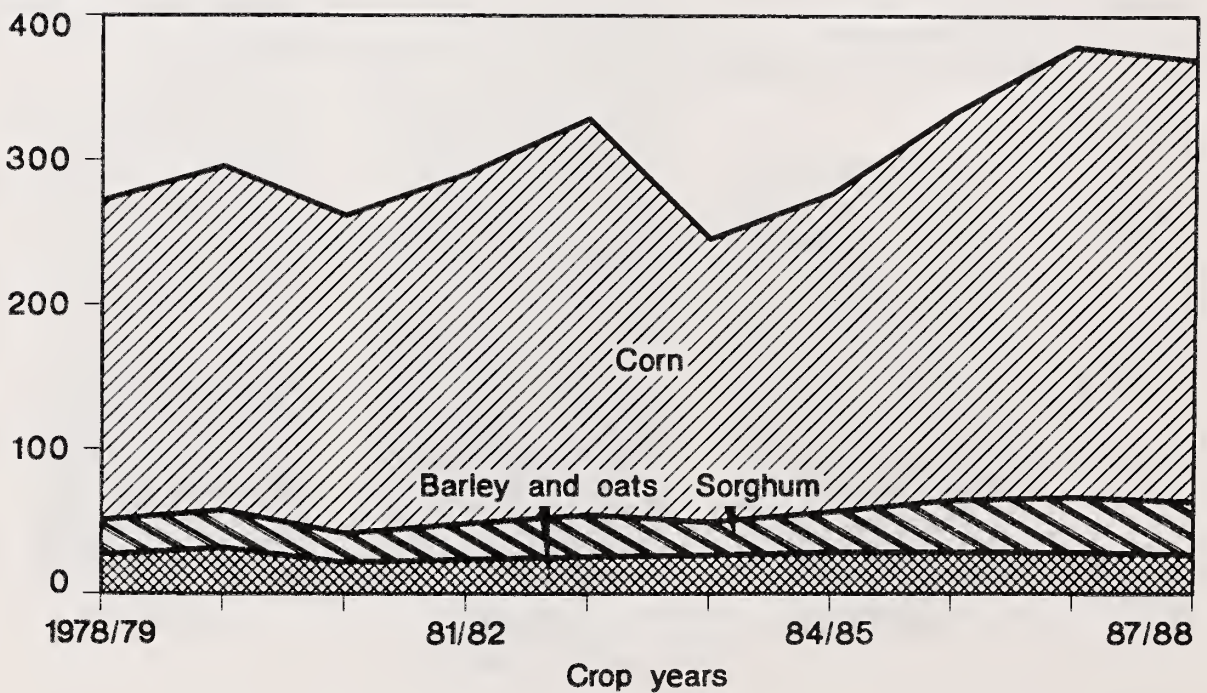
## U.S. Corn Supply

Billion bushels



## U.S. Feed Grain Supply

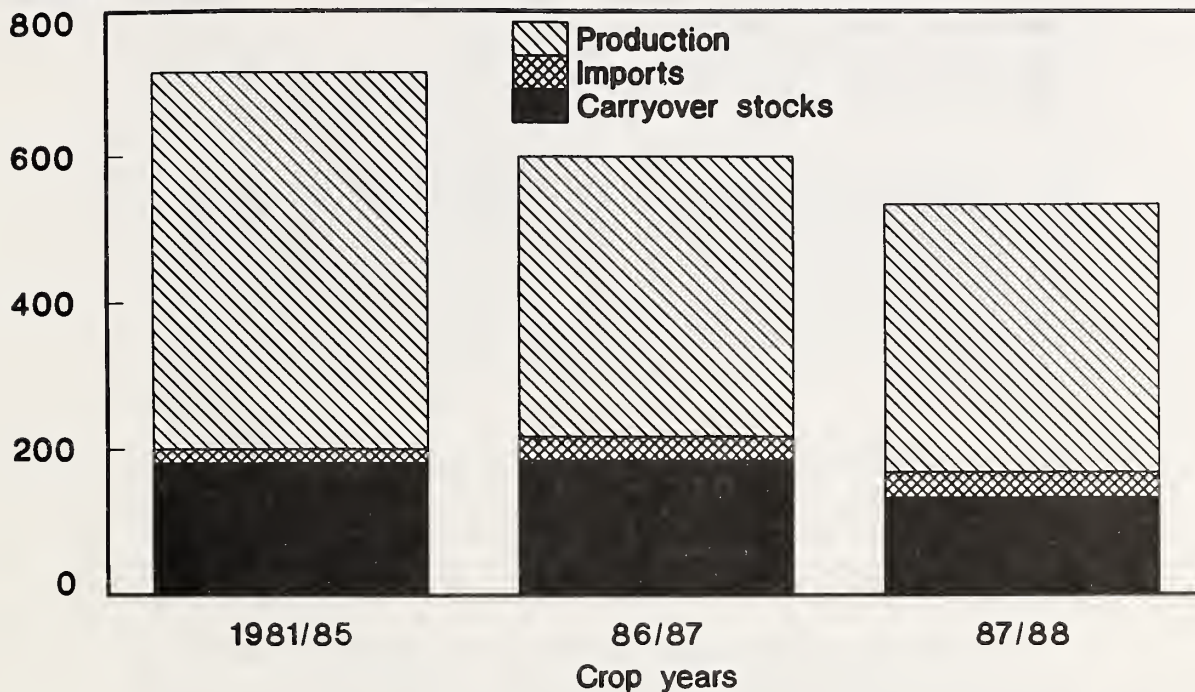
Million metric tons





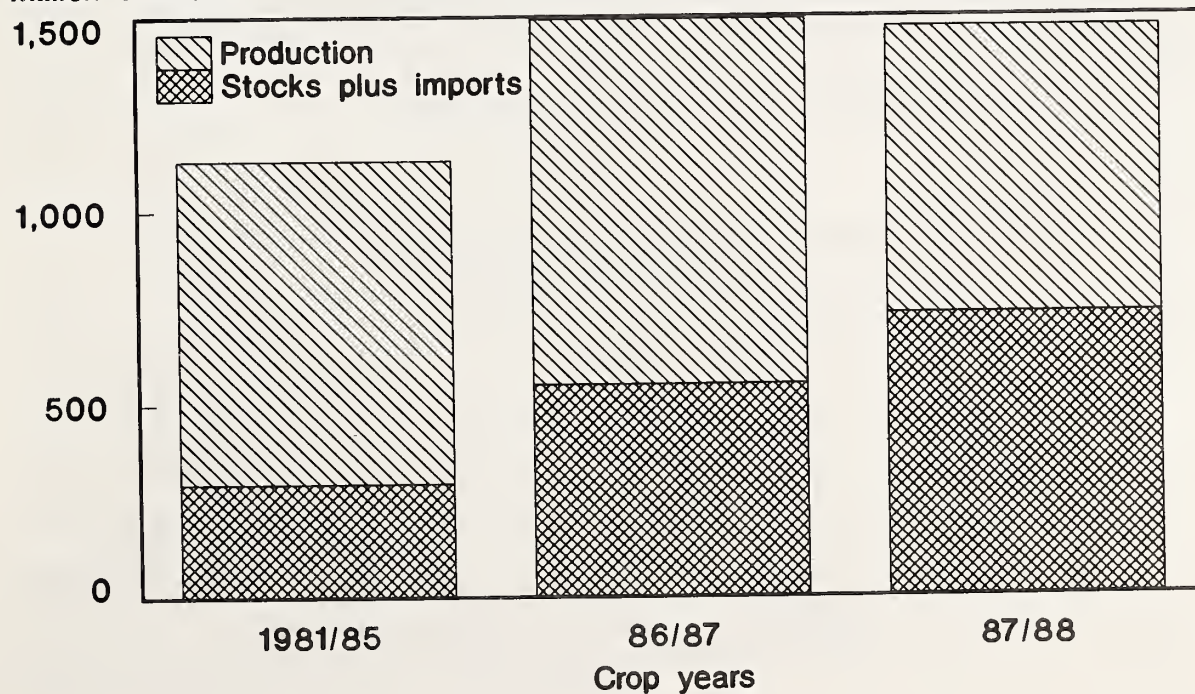
## U.S. Oats Supply

Million bushels



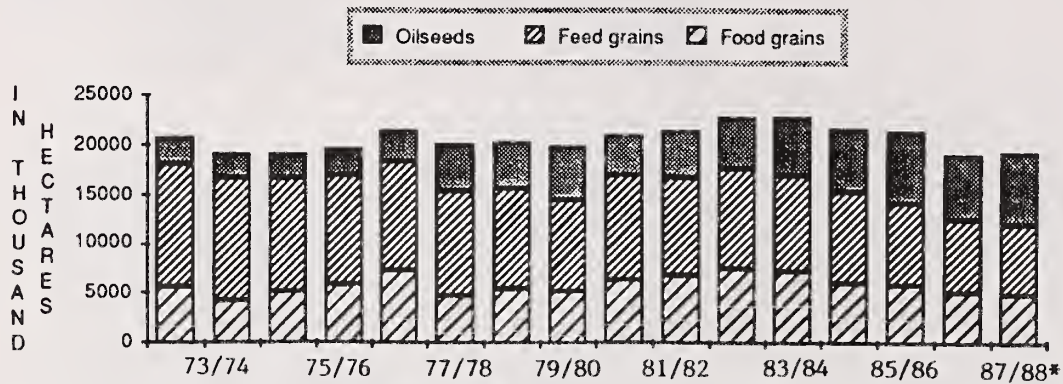
## U.S. Sorghum Supply

Million bushels





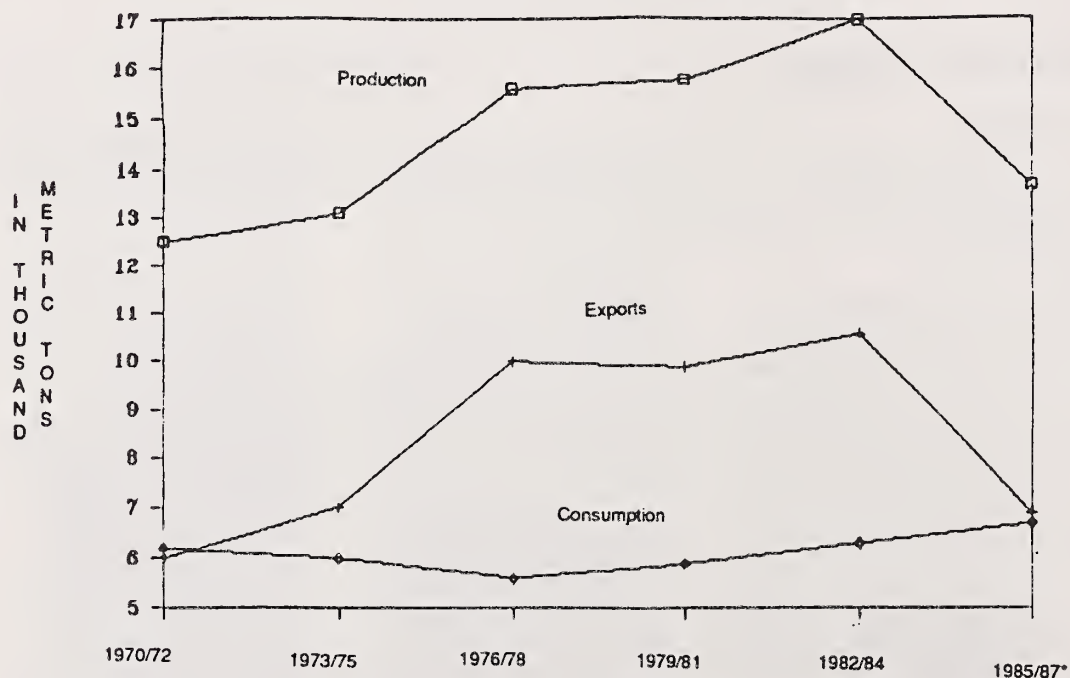
## Argentine Planted Area -Grains and Oilseeds-



\* Estimated

Source: Argentine Agriculture, Livestock, and Fishing Secretariat and private estimates

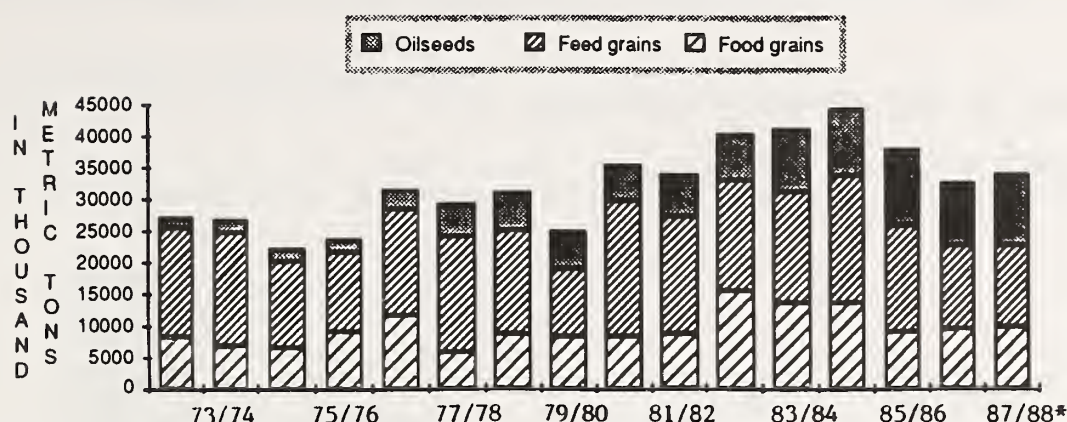
## Argentina: Production, domestic consumption and exports of Corn and Grain Sorghum (Three - Year averages)



\* Estimated

Source: Argentine Agriculture, Livestock, and Fishing Secretariat; National Grain Board and private estimates

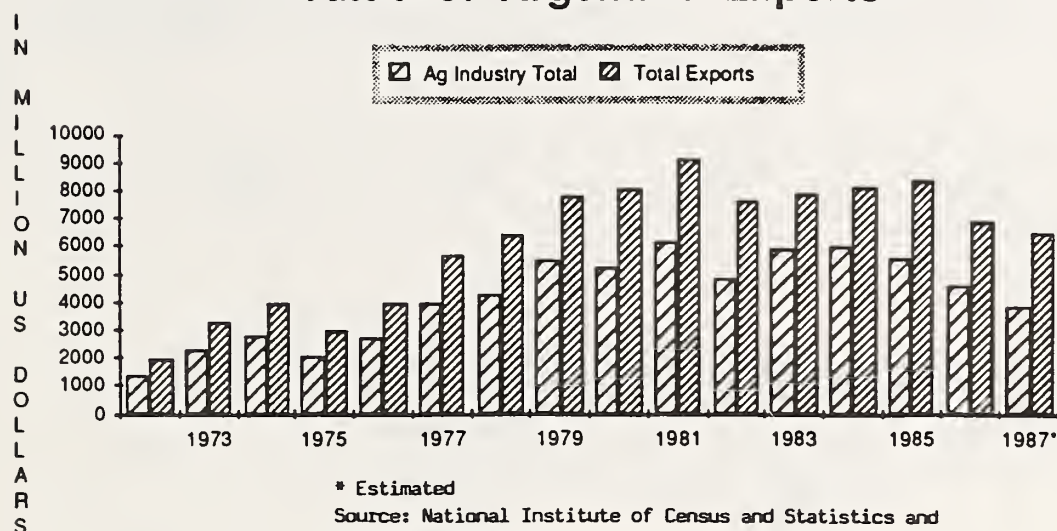
## Argentina: Grains and Oilseeds Production



\* Estimated

Source: Argentine Agriculture, Livestock, and Fishing Secretariat and private estimates

## Value of Argentine Exports



\* Estimated

Source: National Institute of Census and Statistics and private estimates

### PRODUCTION AND MARKETING COSTS OF CORN IN VARIOUS COUNTRIES U.S.DOLLARS PER METRIC TON. (MID-1986 PRICE LEVELS AND EXCHANGE RATES)

	ARGENTINA	BRAZIL	S.AFRICA	THAILAND	U.S.A.
TOTAL VARIABLE COST	45.60	73.28	61.12	43.98	58.70
TOTAL FIXED COST	39.62	75.10	47.02	35.18	60.52
TOTAL PRODUCTION COST	85.22	148.38	108.14	79.16	119.22
MARKETING COST	30.46	37.37	35.60	33.92	25.10
TOTAL COST	115.68	185.75	143.74	113.08	144.32

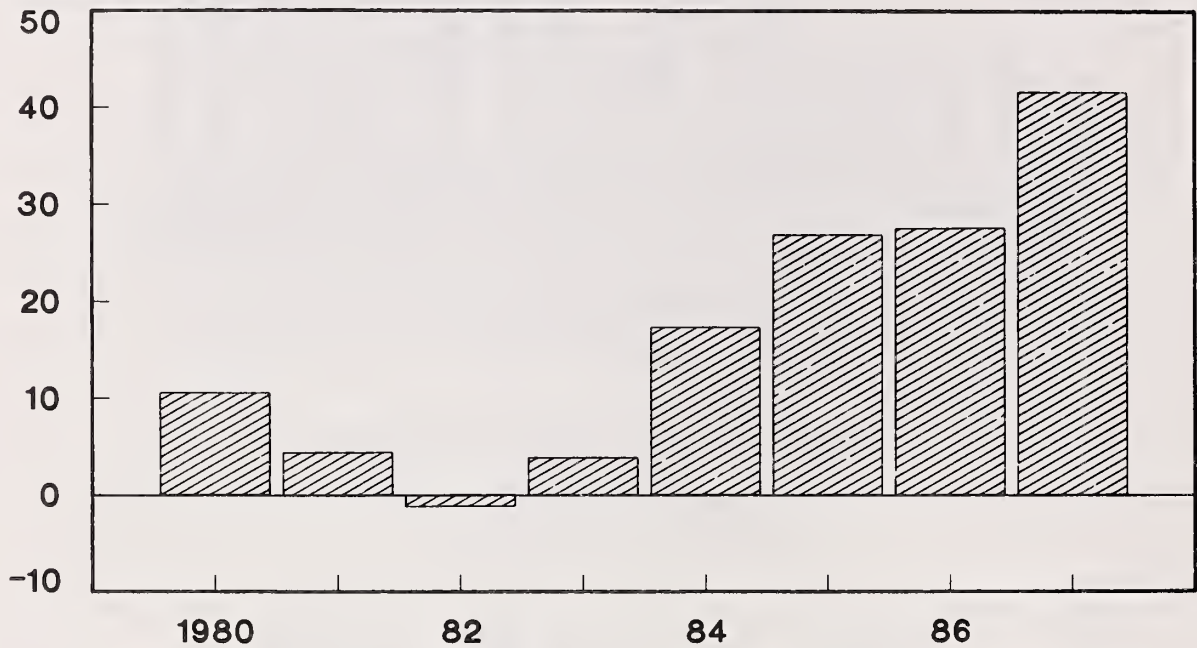
SOURCE: OHIO STATE UNIVERSITY. SEE REFERENCES





## Returns to U.S. Sheep Producers

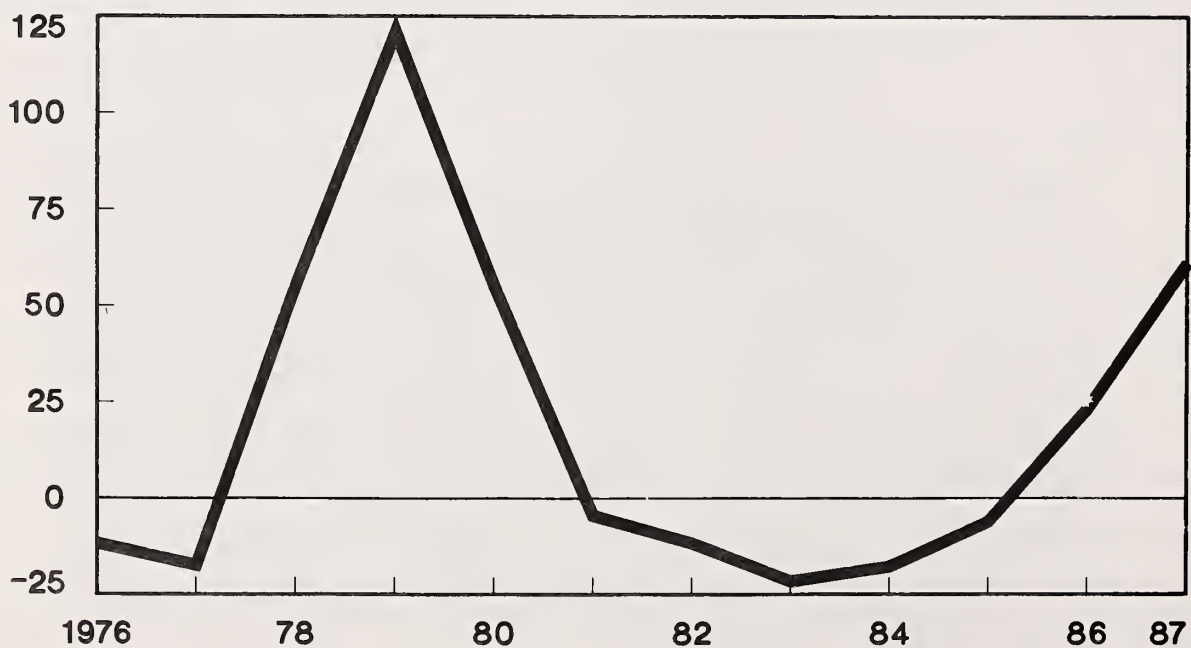
Dollars per ewe



Receipts less cash expenses

## Returns to U.S. Cow-Calf Producers

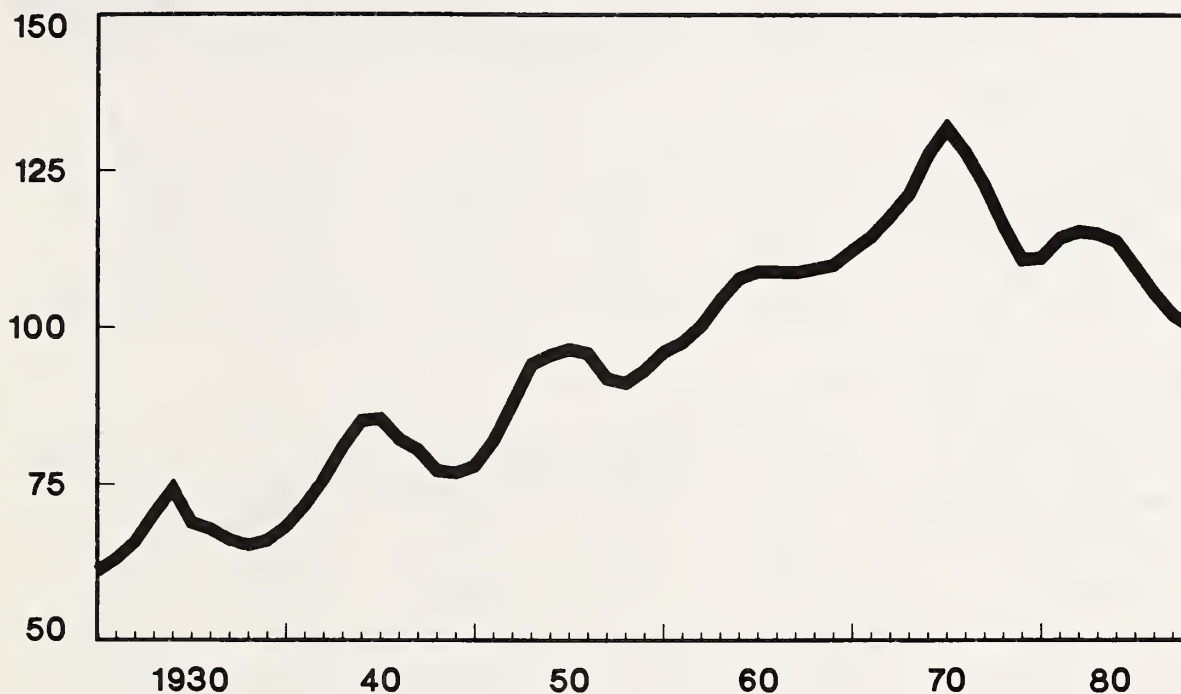
Dollars per cow



Receipts less cash expenses.

## U.S. Cattle and Calf Inventory

Million head



## Beef Consumption and Prices

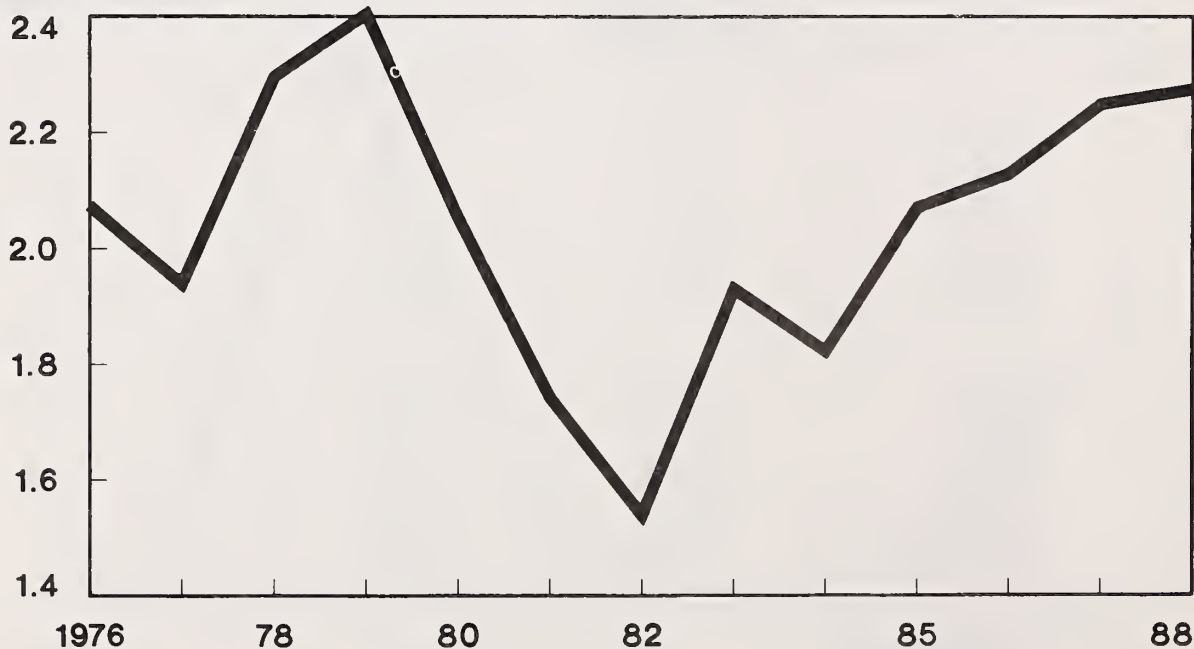
Year	Per capita consumption	ERS retail price
	Pounds	Dollars per pound
1979	78.0	2.26
1980	76.5	2.38
1981	77.2	2.39
1982	77.1	2.42
1983	78.7	2.38
1984	78.6	2.40
1985	79.1	2.33
1986	79.8	2.31
1987	76.4	2.42
1988	73.1	2.44
% change, 1987-1988	-4	+1

## Feeder Cattle Supply, October 1

	1984	1985	1986	1987	% change
1,000 head					
<b>Calves less than 500 lb.:</b>					
On farms July 1	35,500	33,600	32,200	00,000	00.0
Slaughter July-Sept.	856	872	859	000	00.0
On feed Oct. 1	495	287	310	000	00.0
Subtotal	34,149	32,439	31,031	00,000	00.0
<b>Steers and heifers 500 lb. and over:</b>					
On farms July 1	24,450	24,200	23,300	00,000	00.0
Slaughter July-Sept.	7,174	7,465	7,521	0,000	00.0
On feed Oct. 1	9,999	8,924	9,314	0,000	00.0
Subtotal	7,277	7,771	6,465	0,000	00.0
<b>Total supply</b>	<b>41,426</b>	<b>40,210</b>	<b>37,496</b>	<b>00,000</b>	<b>00.0</b>

## Beef Imports

Million pounds

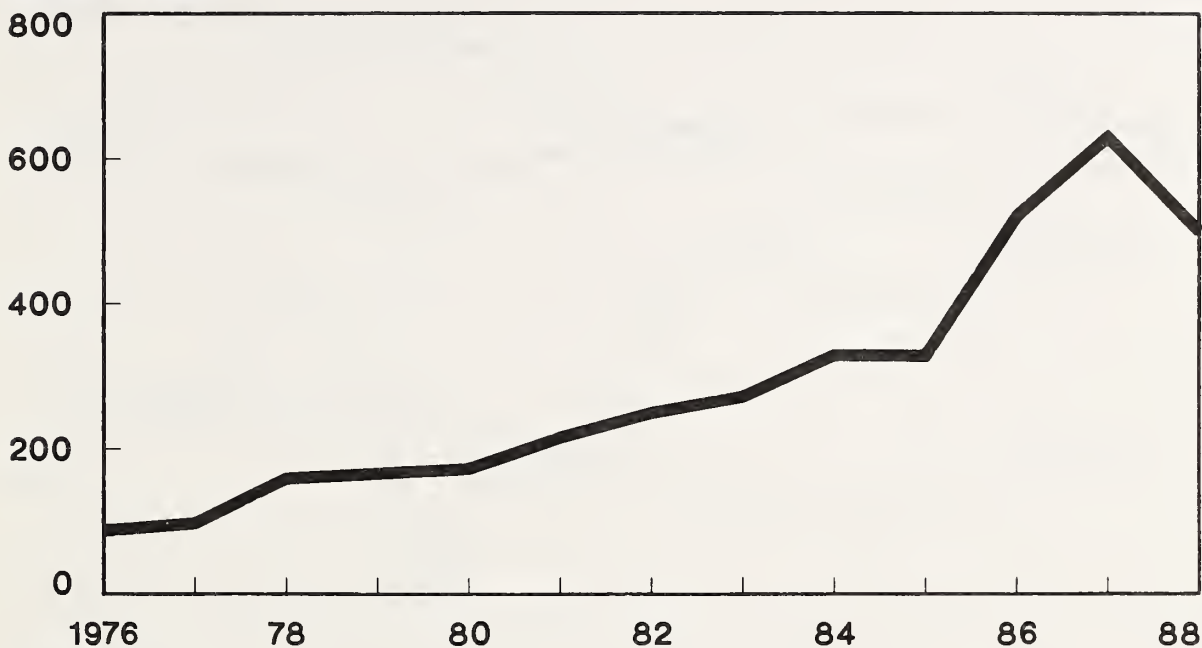


Carcass weight.



## Beef Exports

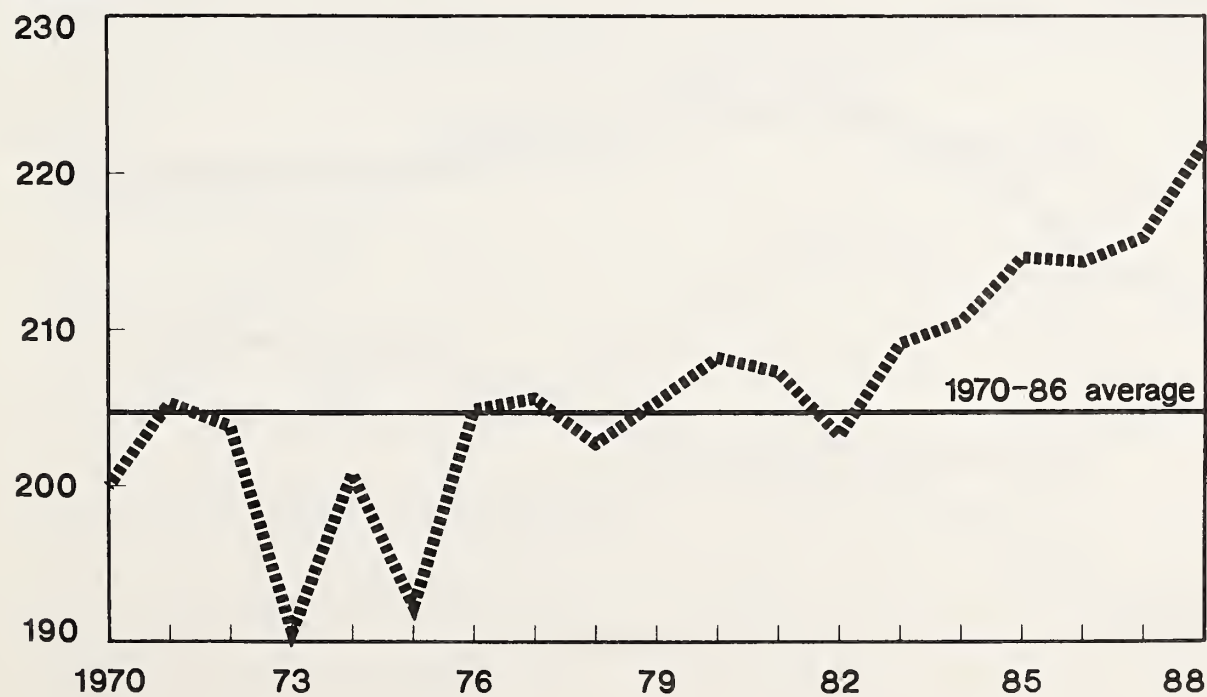
Million pounds



Carcass weight.

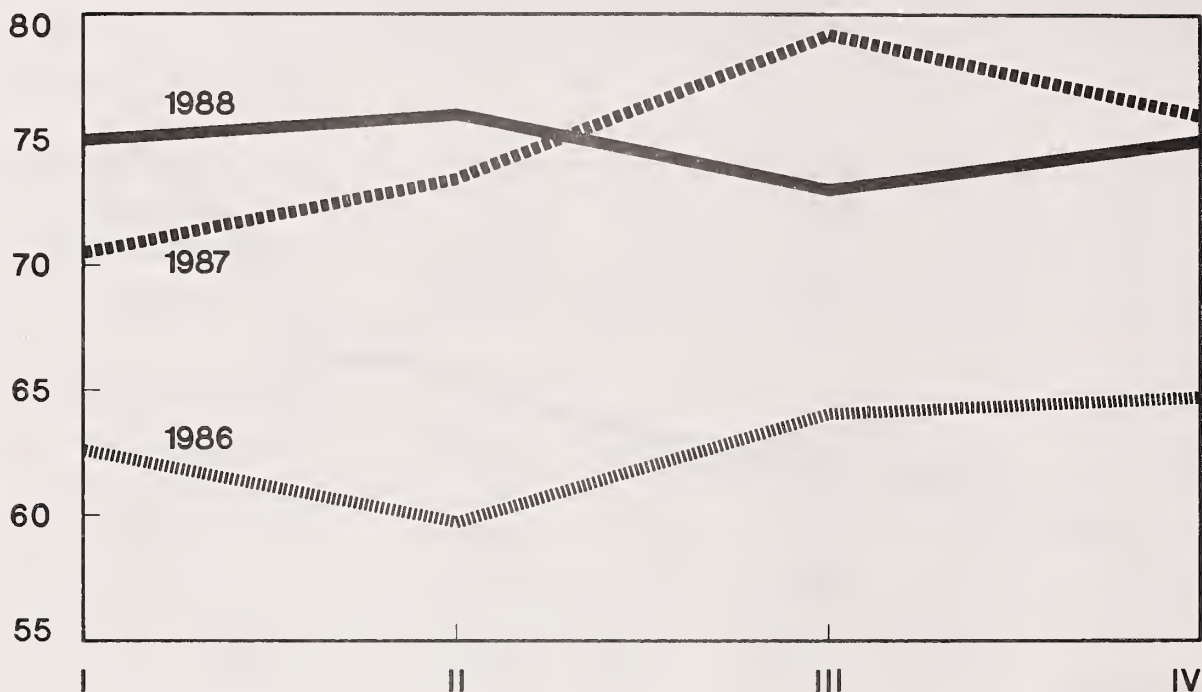
## Per Capita Red Meat and Poultry Consumption

Pounds



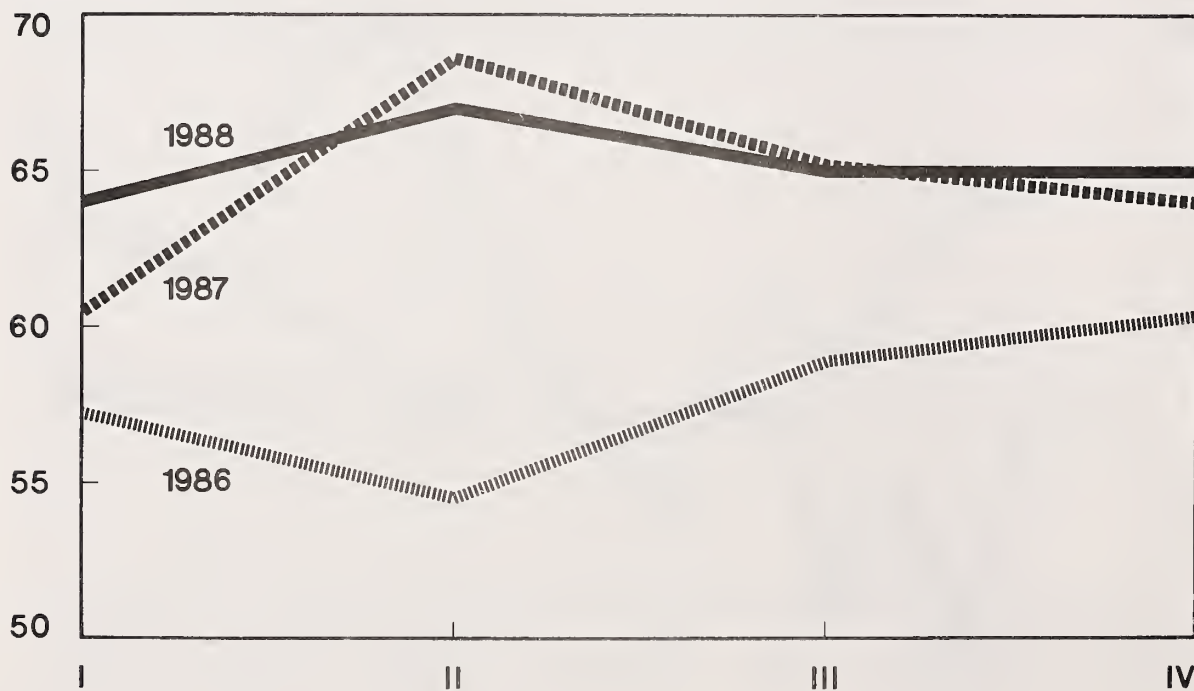
## Medium #1 Feeder Steer Prices, Kansas City

\$ per cwt



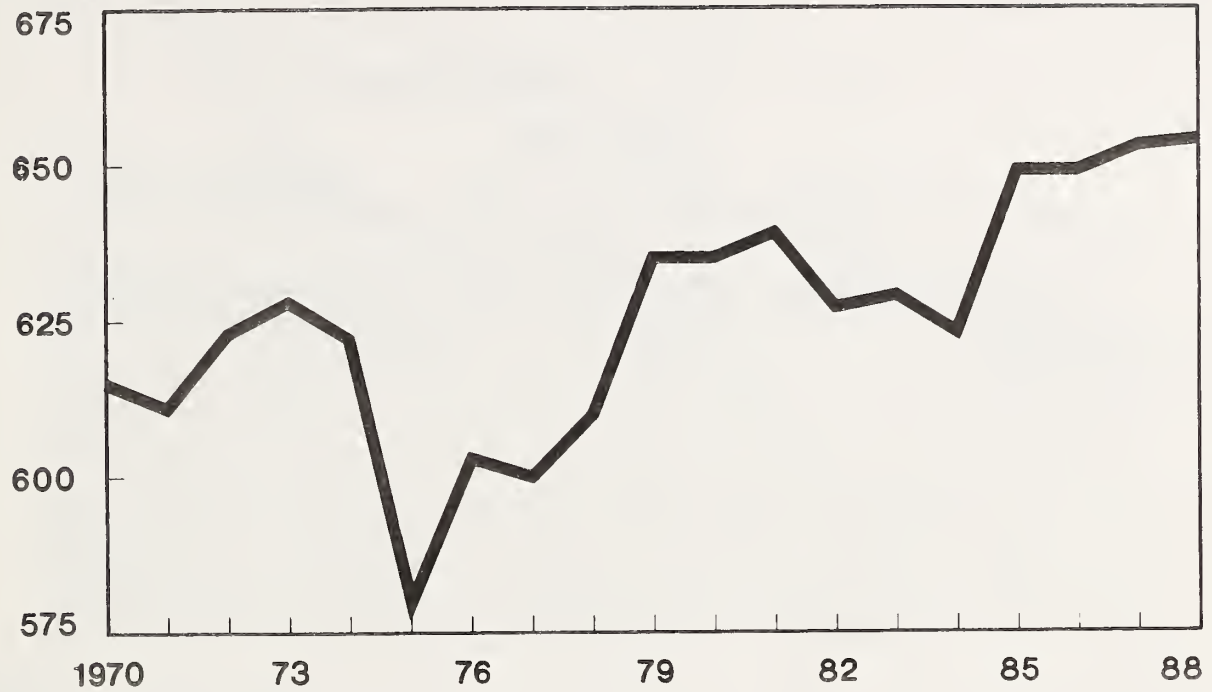
## Choice Steer Prices, Omaha

\$ per cwt



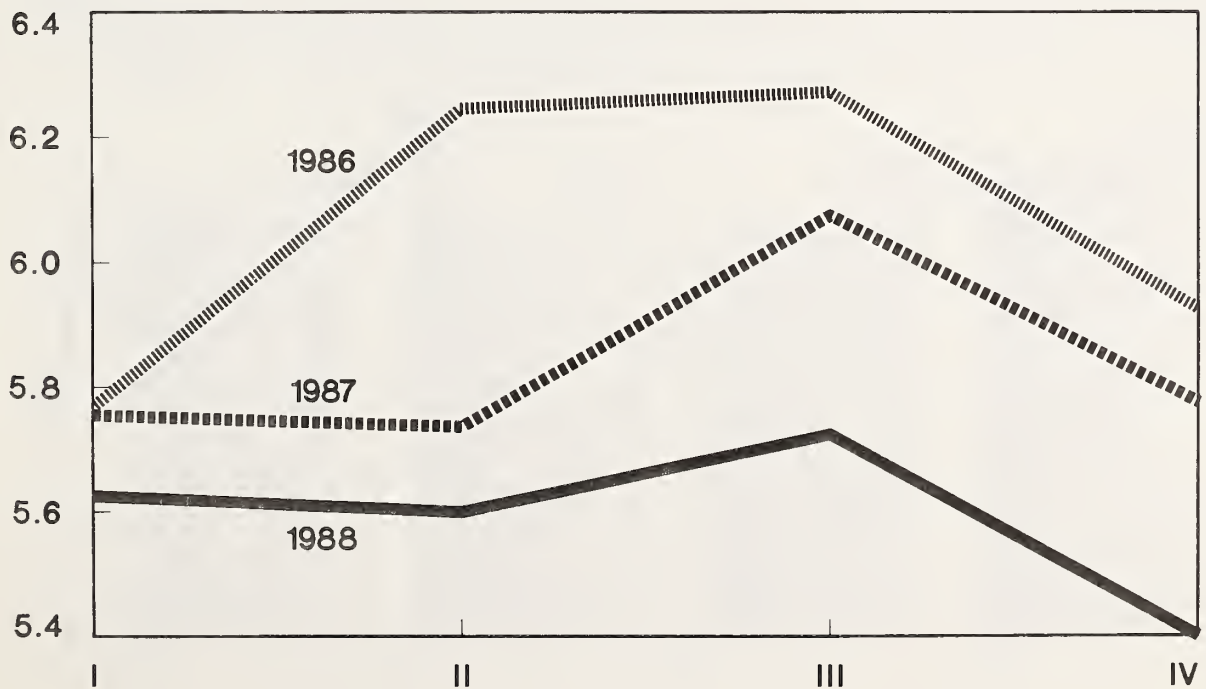
## Cattle: Average Commercial Dressed Weight

Pounds



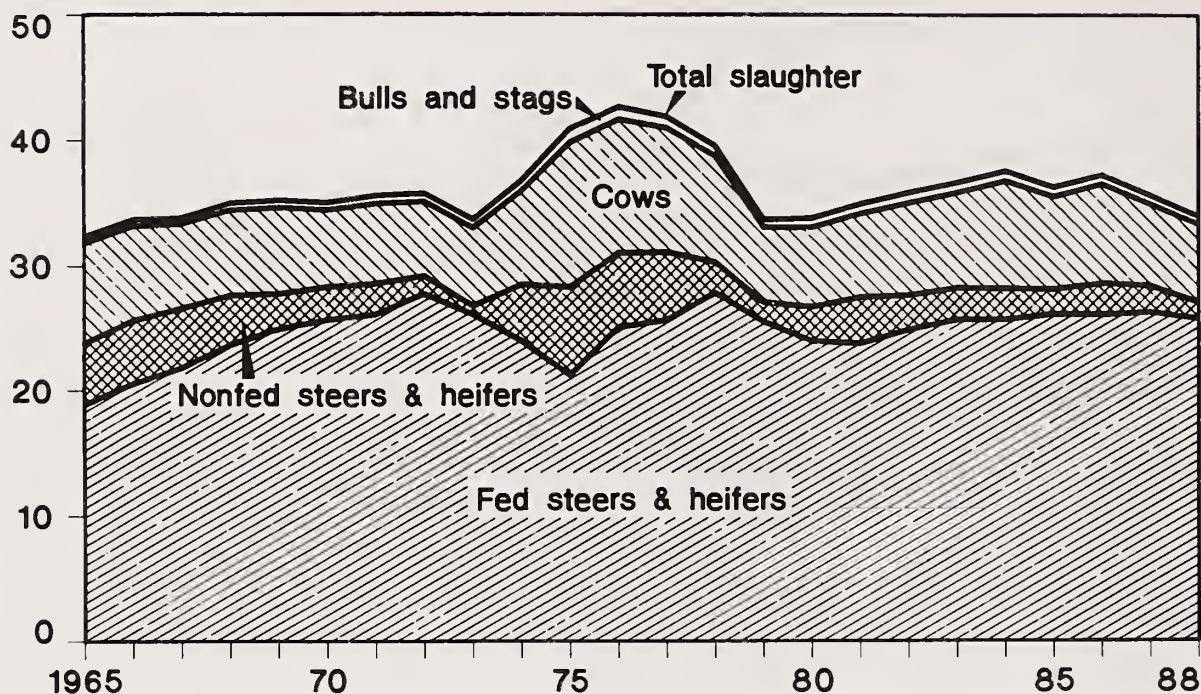
## Commercial Beef Production

Billion pounds



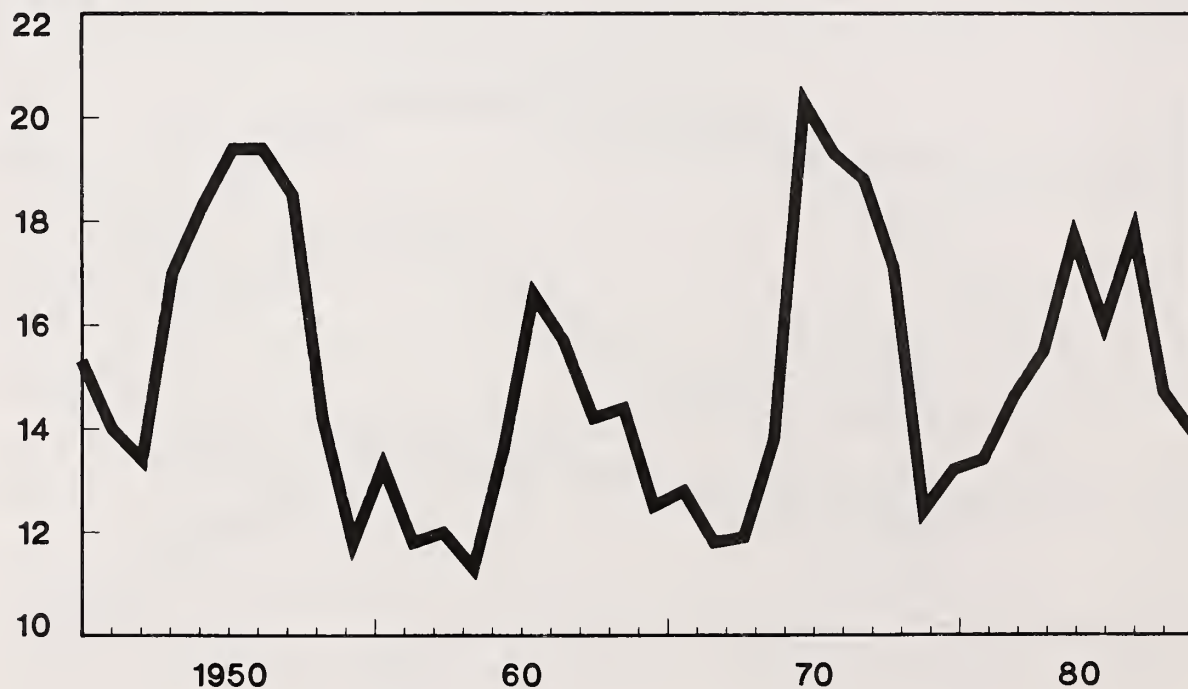
## Commercial Cattle Slaughter by Class

Million head



## Share of Cow Herd Slaughtered

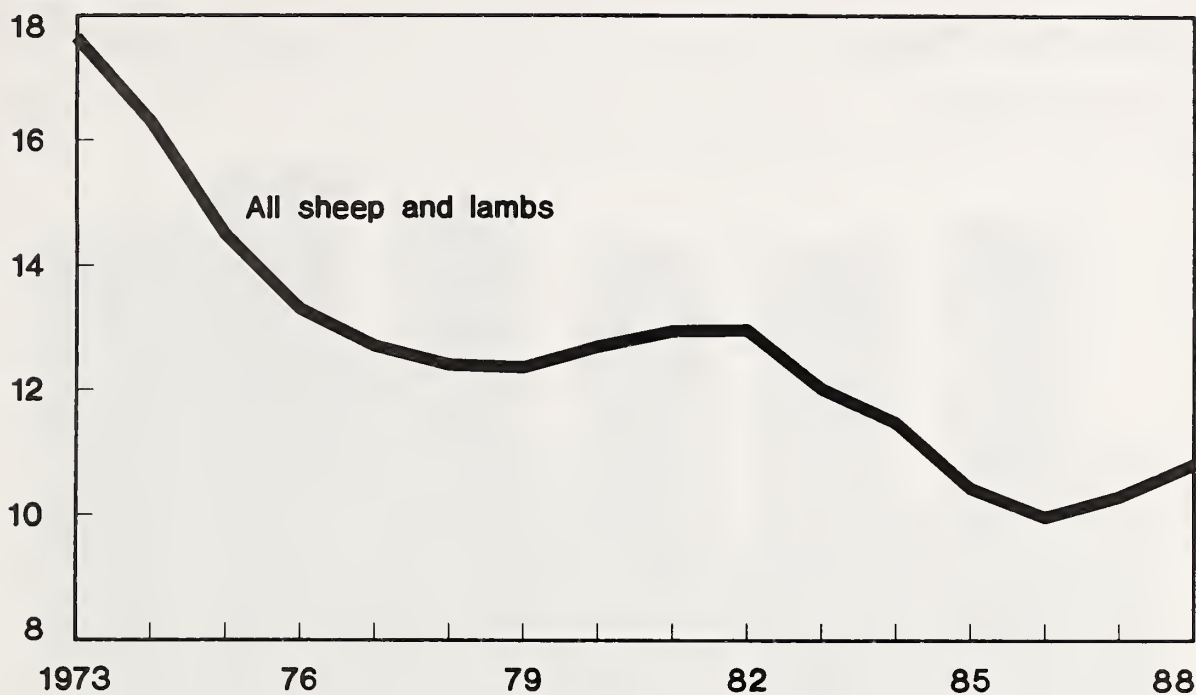
Percent





## U.S. Sheep Inventory

Million head

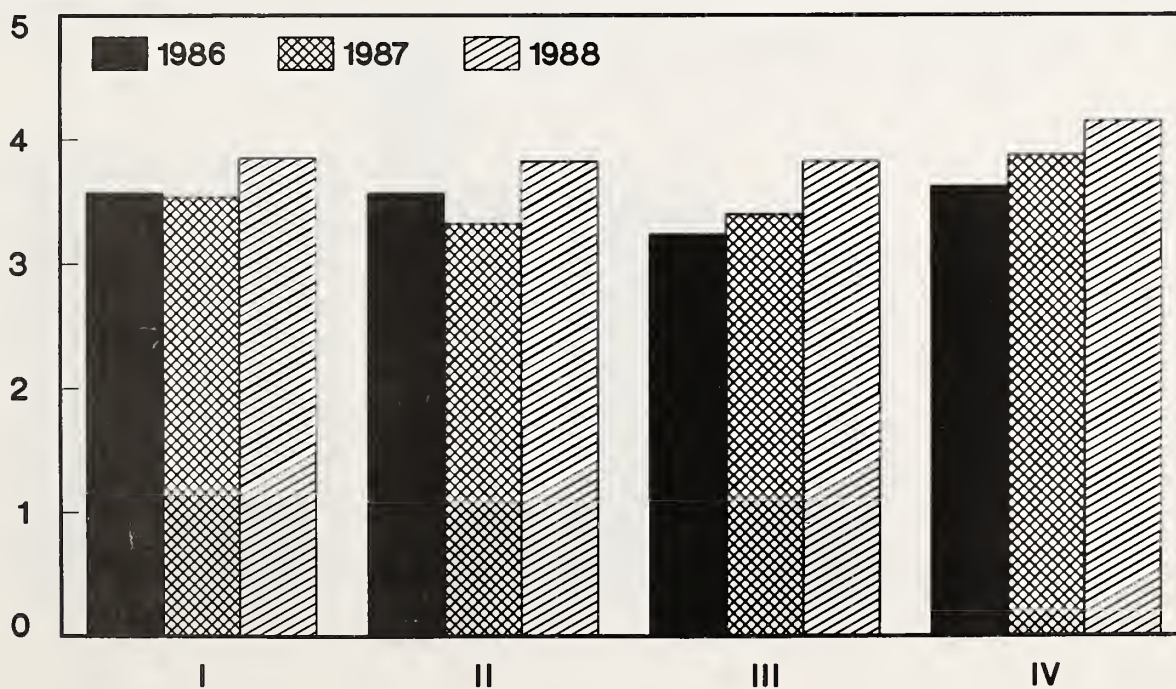


## Hog Outlook

*Leland Southard*

## Commercial Pork Production

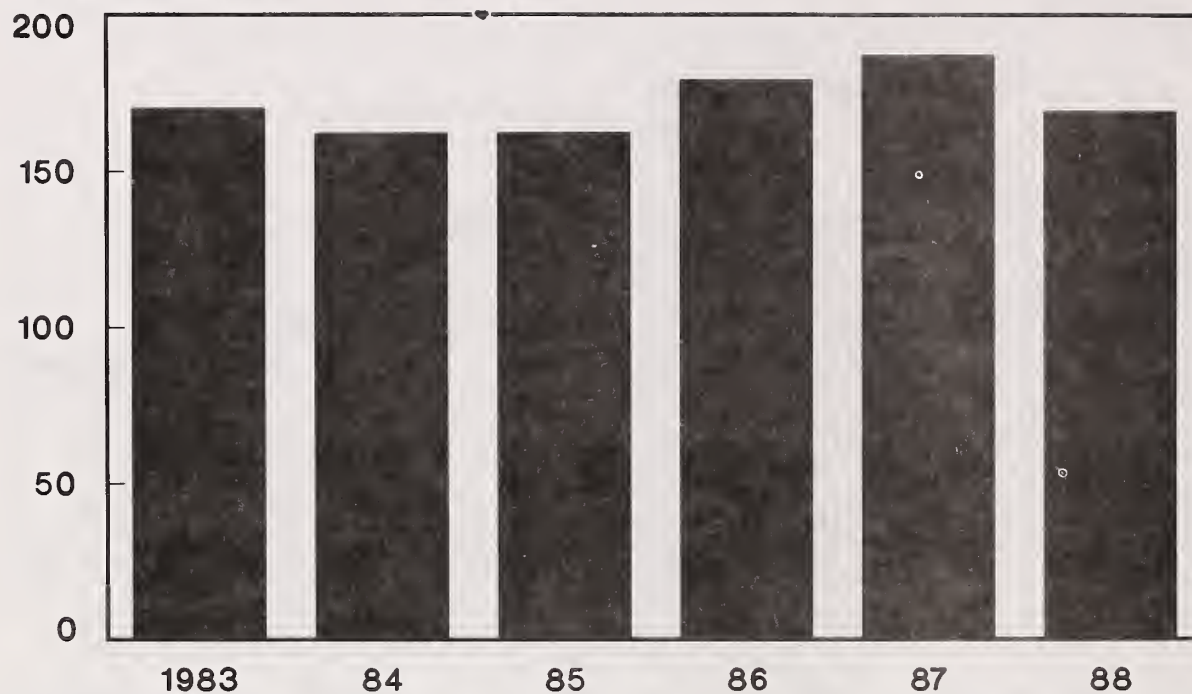
Billion pounds





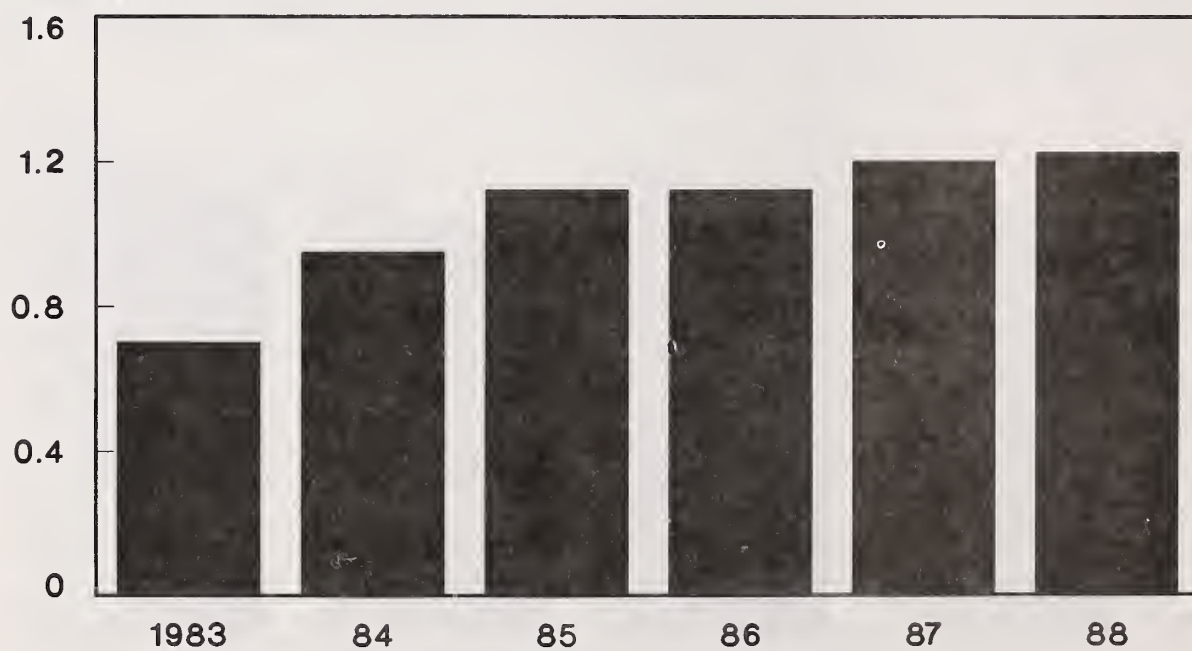
## Retail Pork Prices

Cents per pounds



## Imports of Pork Products

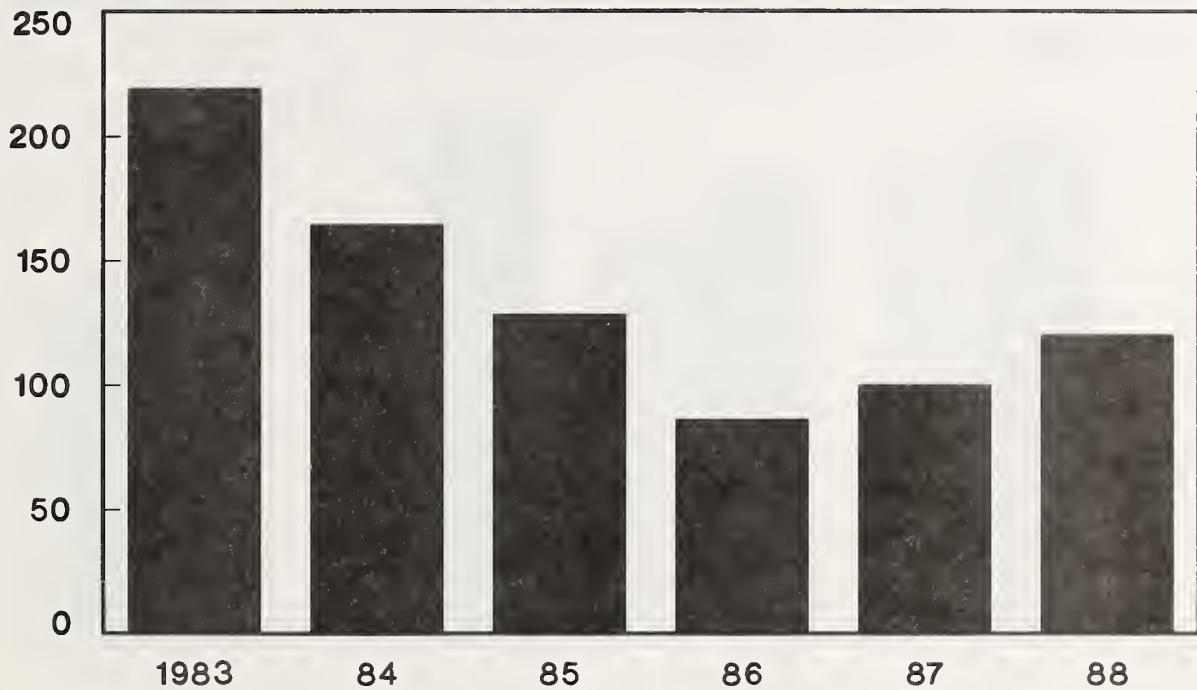
Billion pounds



Carcass weight

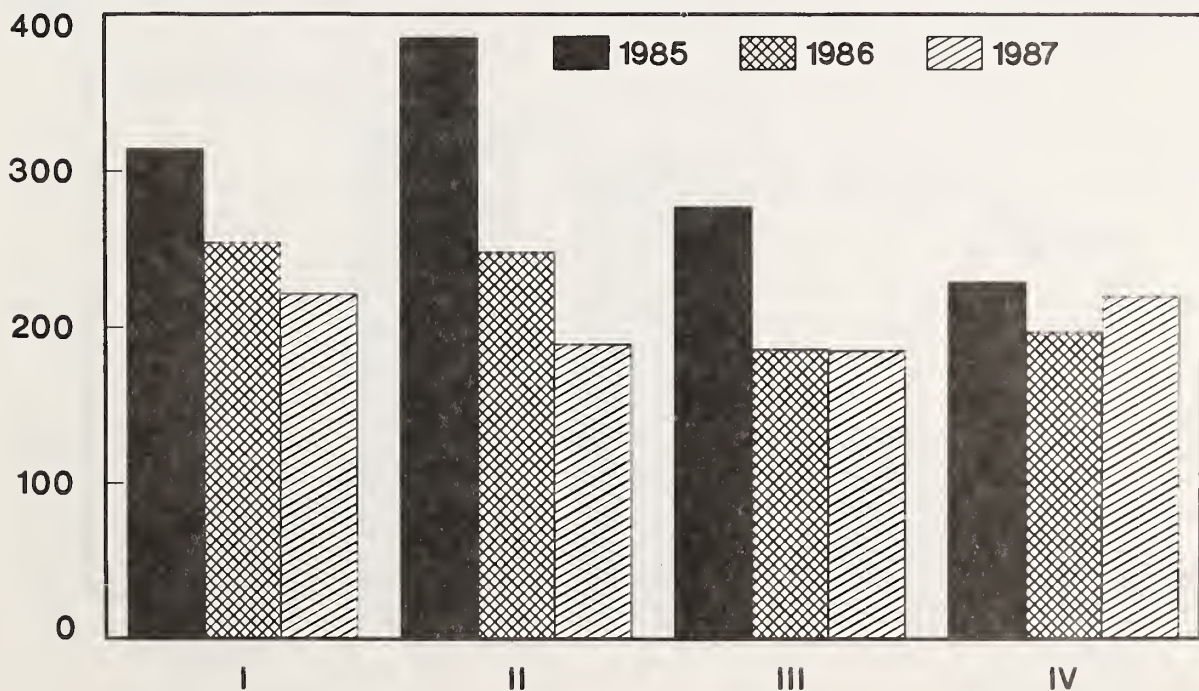
## U.S. Pork Exports

Million pounds



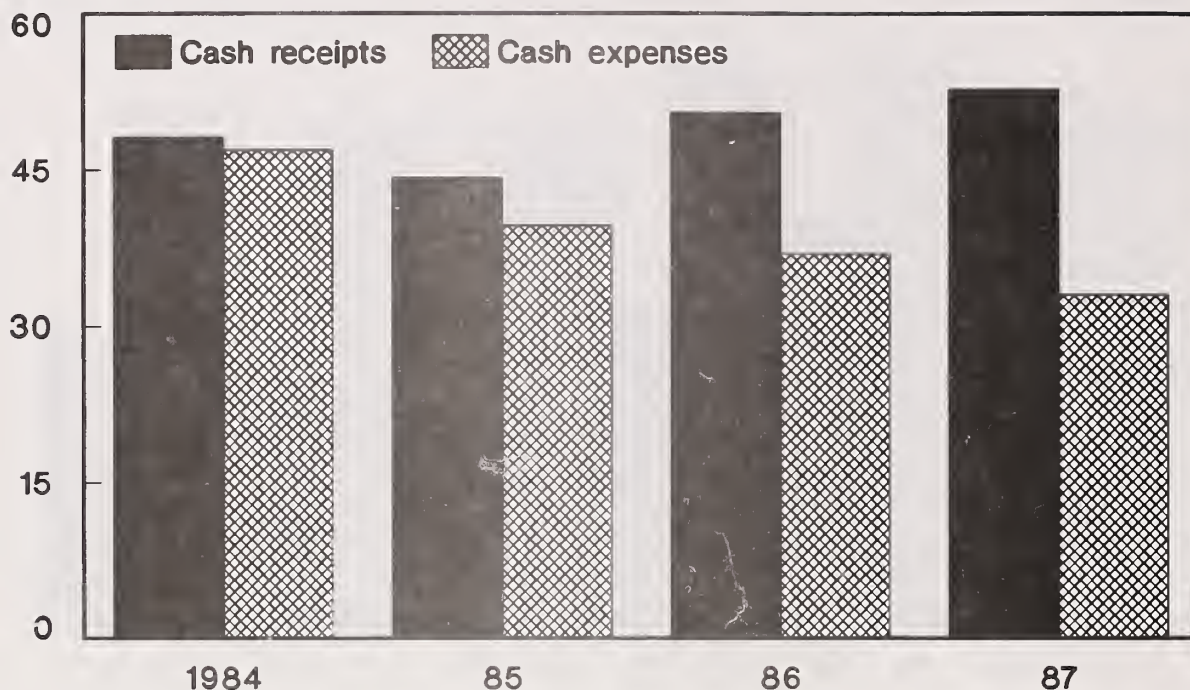
## Pork in Cold Storage

Million pounds



## Farrow to Finish Costs of Production

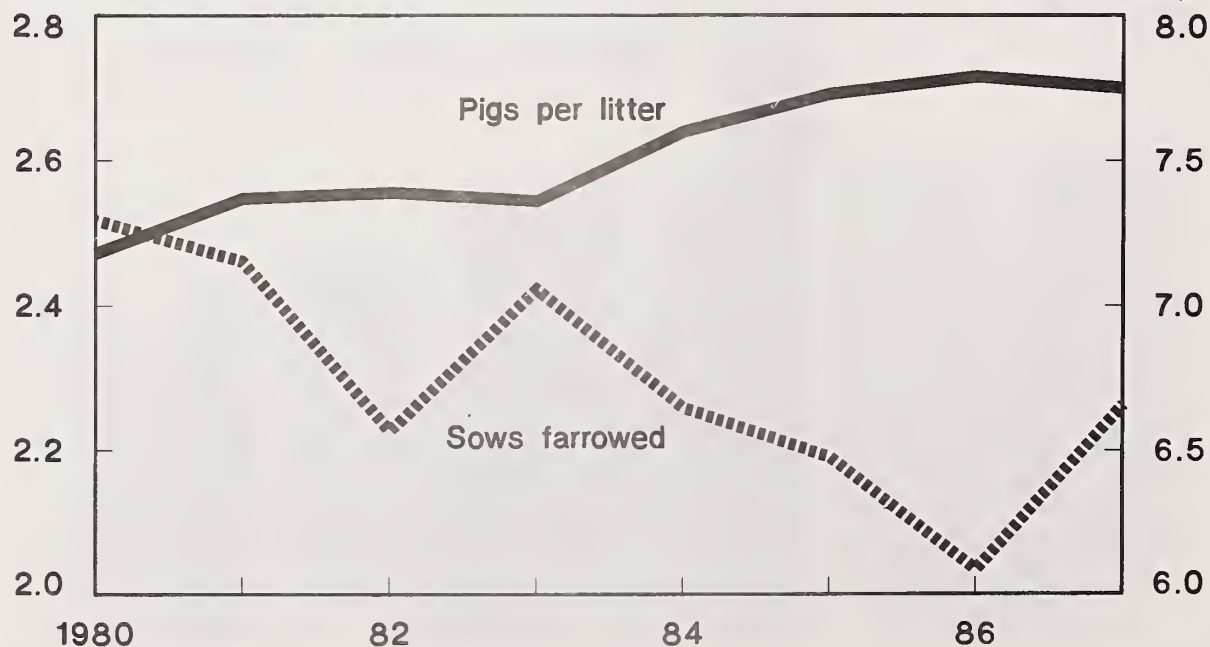
\$ per cwt



## Sows Farrowed and Litter Rate, June-August

Million sows

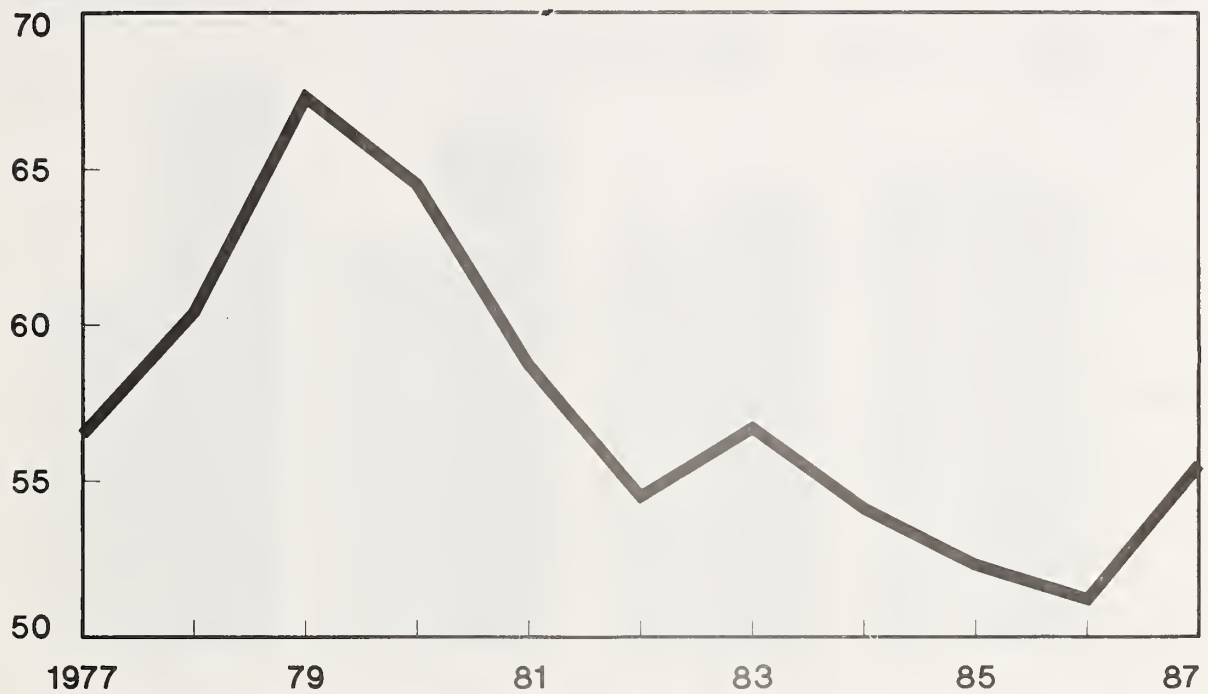
Number of pigs



10 major producing States.

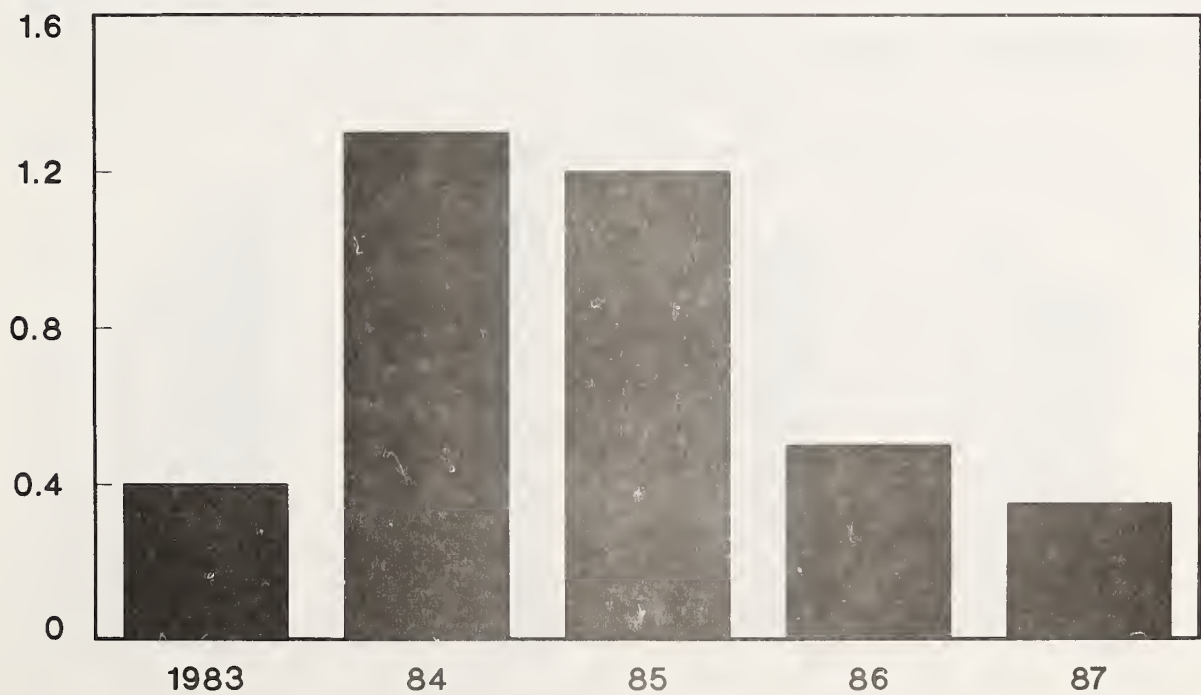
## Hogs and Pigs Inventory, December 1

Million head



## Live Hogs Imported from Canada

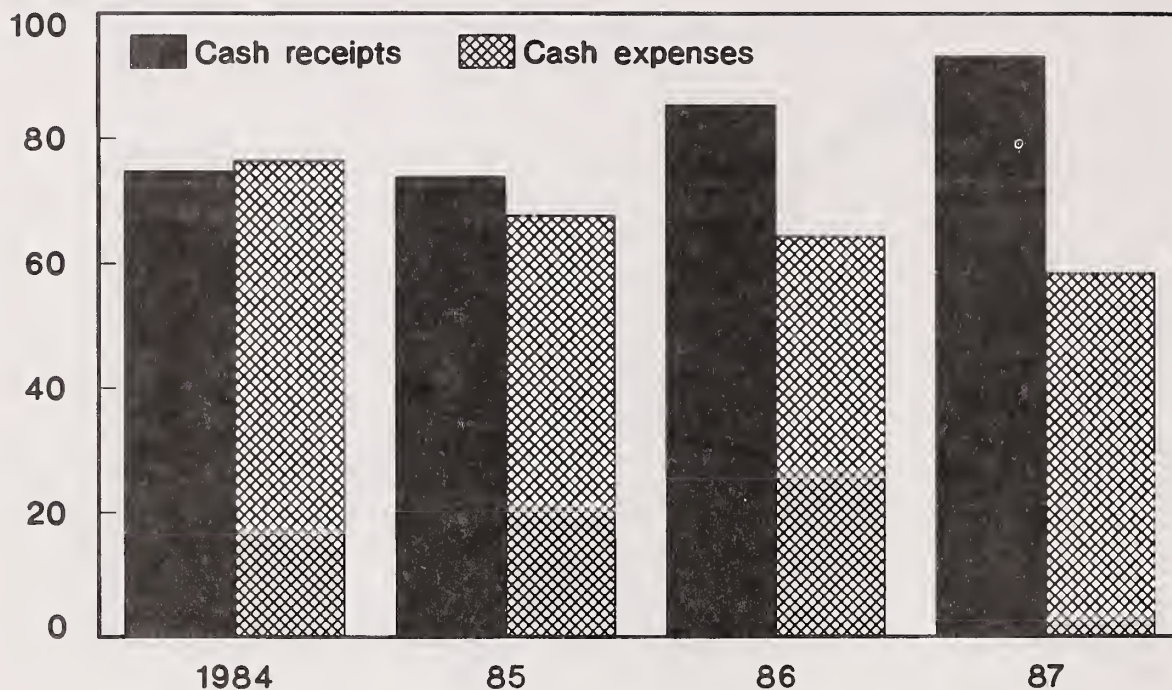
Million head





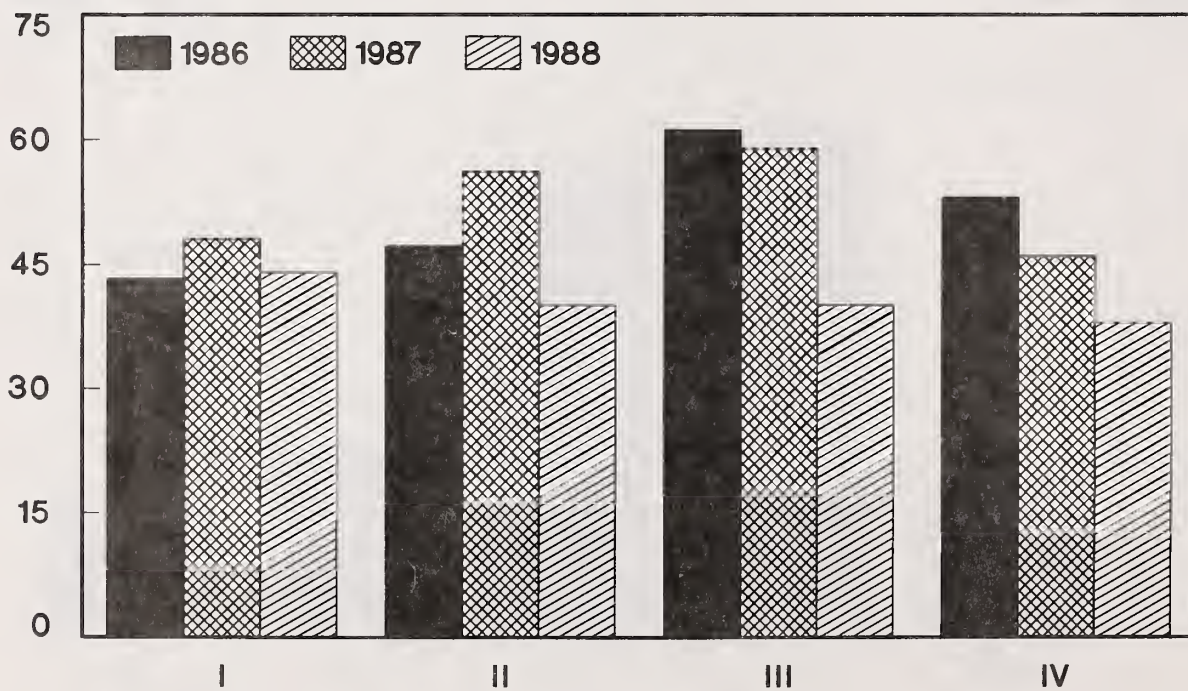
## Feeder Pig Production Costs

\$ per cwt



## Barrow and Gilt Prices, Seven Markets

Dollars per cwt

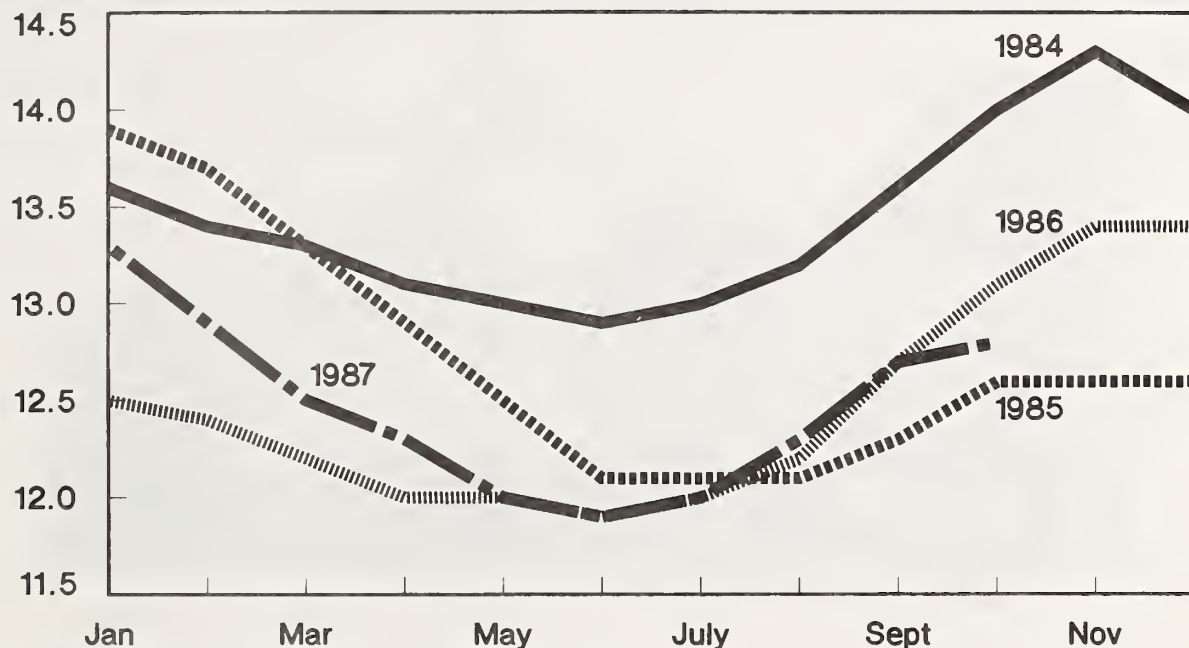






### All-Milk Price

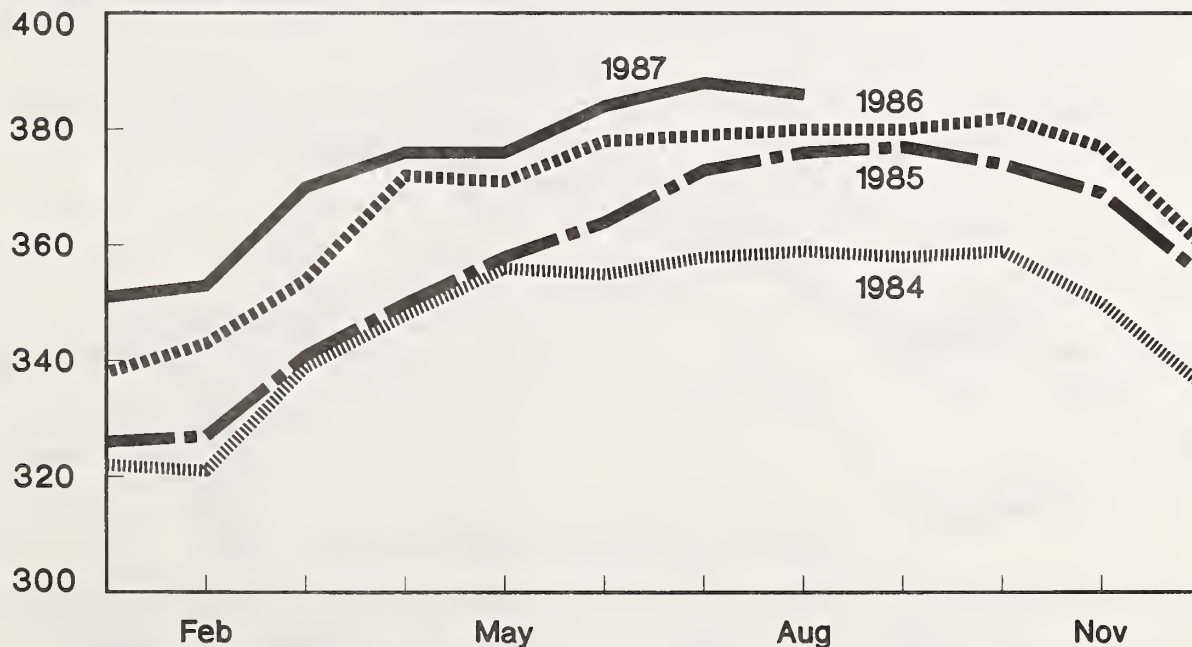
Dollars per cwt



Delivered to plants and dealers.

### Commercial Use of All Dairy Products

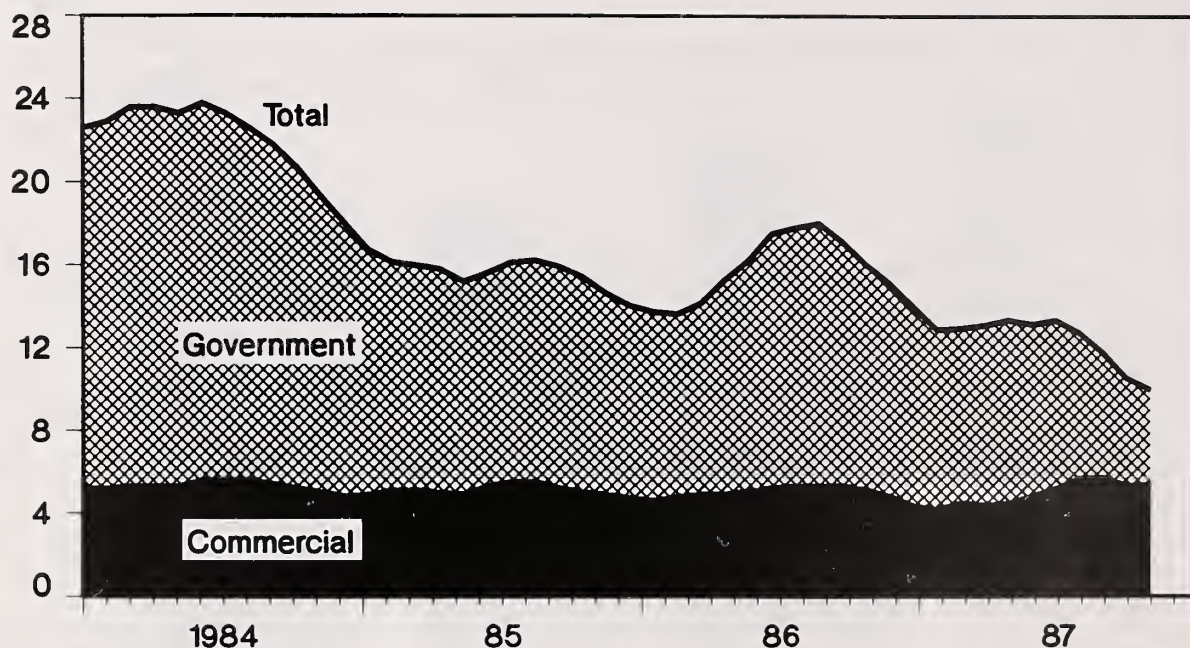
Million pounds per day



Milkfat basis. Three-month moving average, centered.

## Dairy Product Stocks

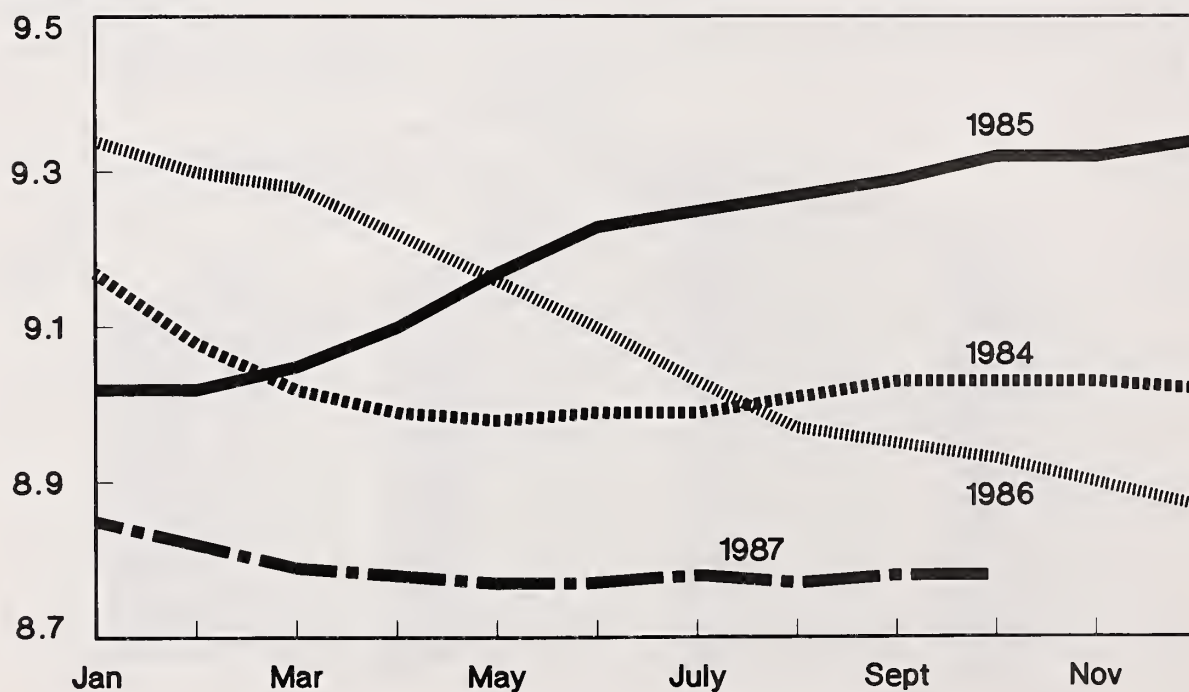
Billion pounds



First of month, milkfat basis.

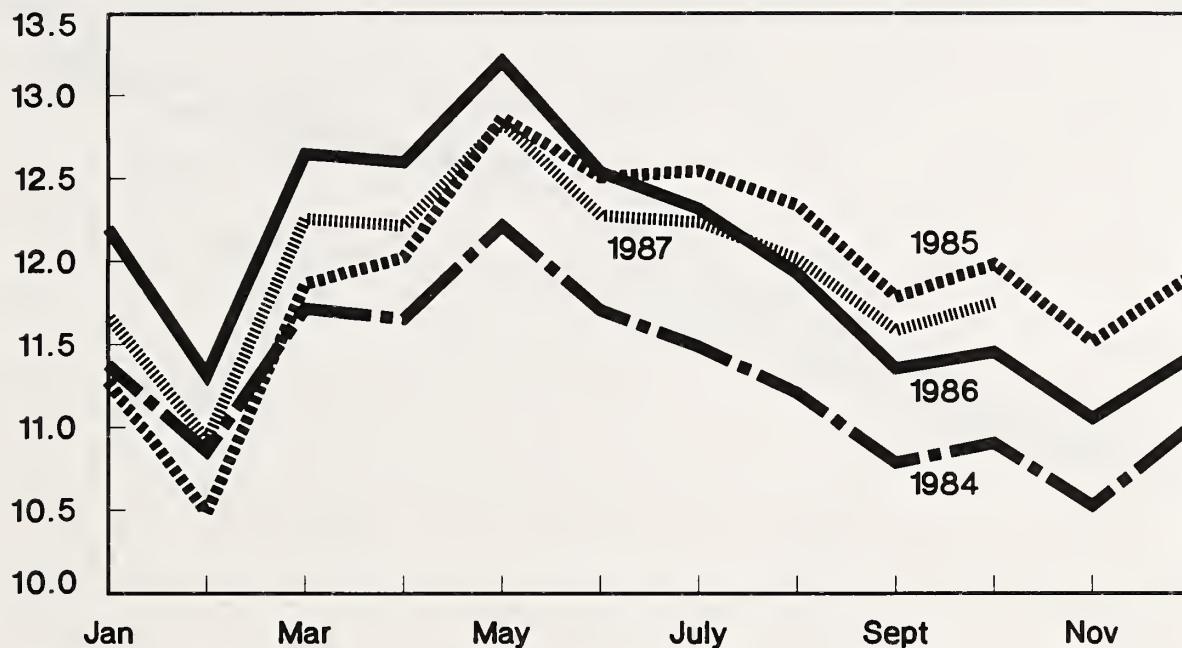
## Milk Cows on Farms, 21 States

Million head



## U.S. Milk Production

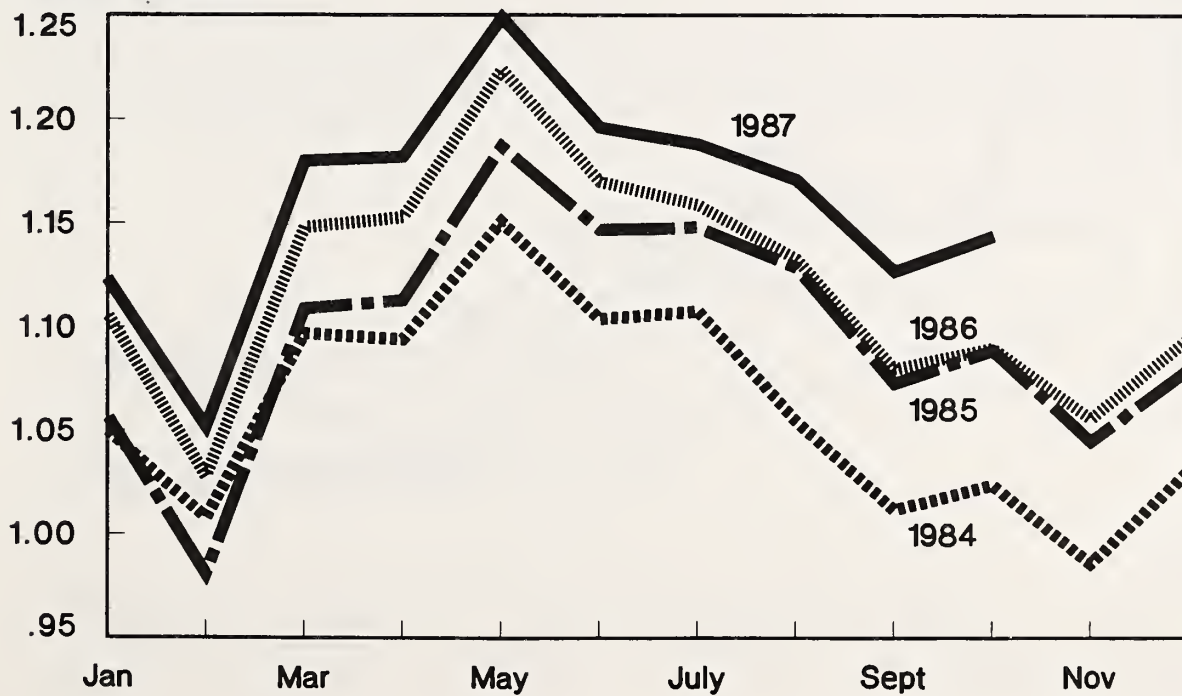
Billion pounds



Estimated from data for 21 States beginning April 1986.

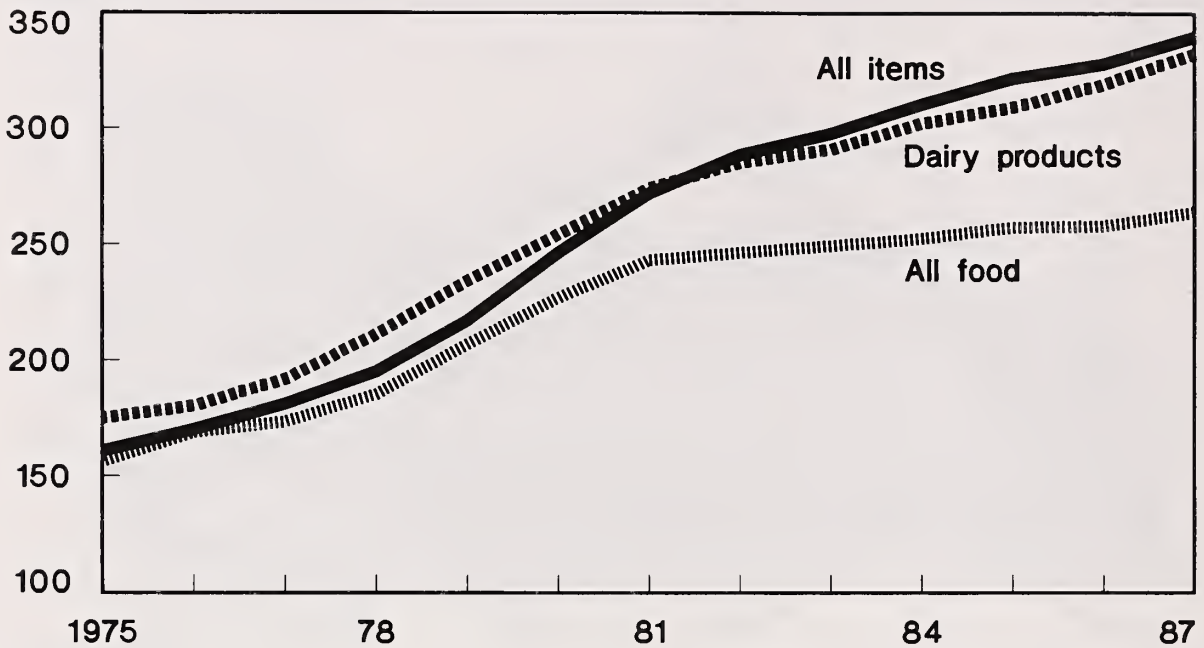
## Milk Production per Cow, 21 States

Thousand pounds



## Retail Price Indexes

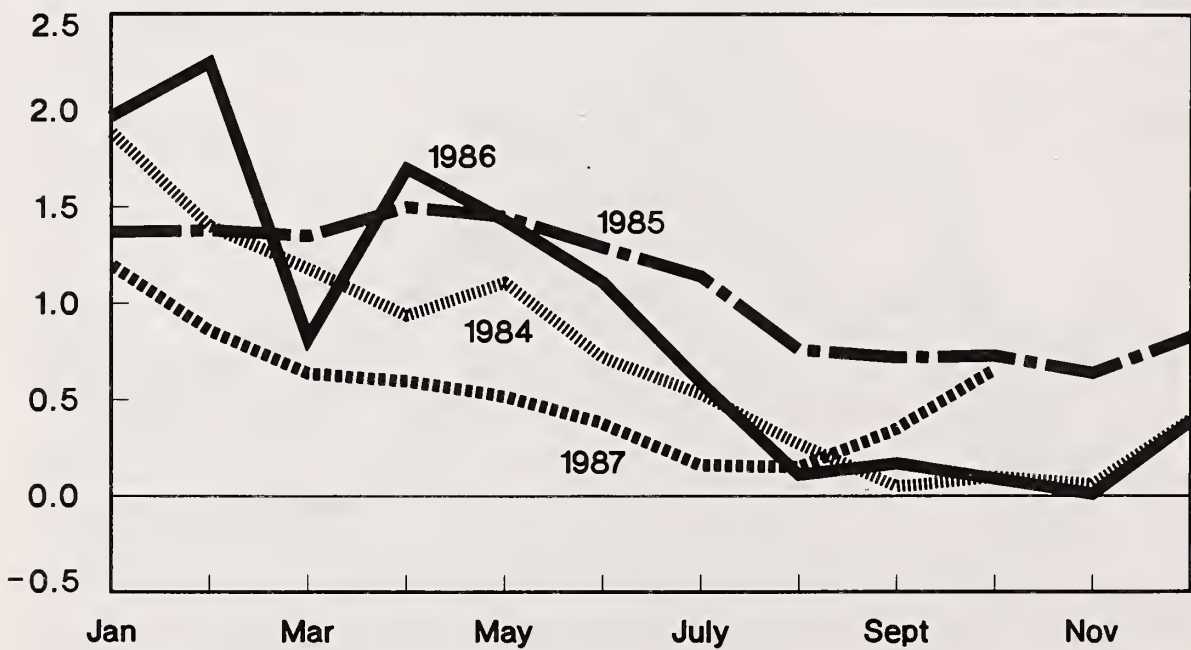
% of 1967



1987 estimated.

## USDA Dairy Product Purchases

Billion pounds

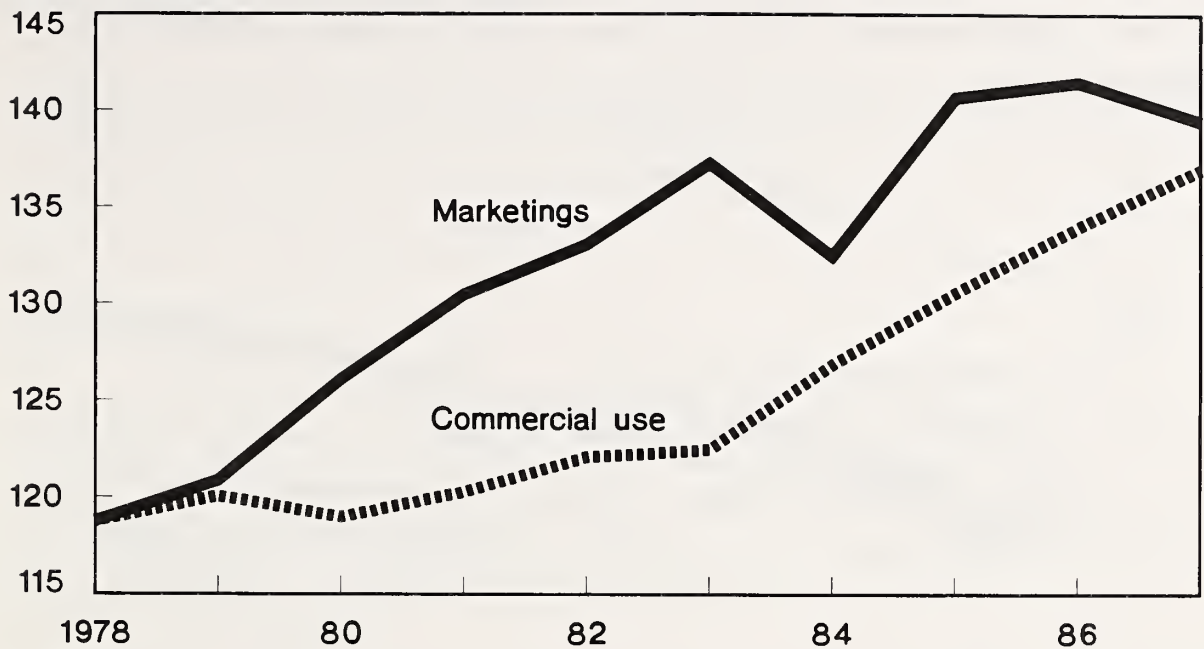


Net removals, milkfat basis.



## Milk Marketings and Commercial Use

Billion pounds



1987 estimated.

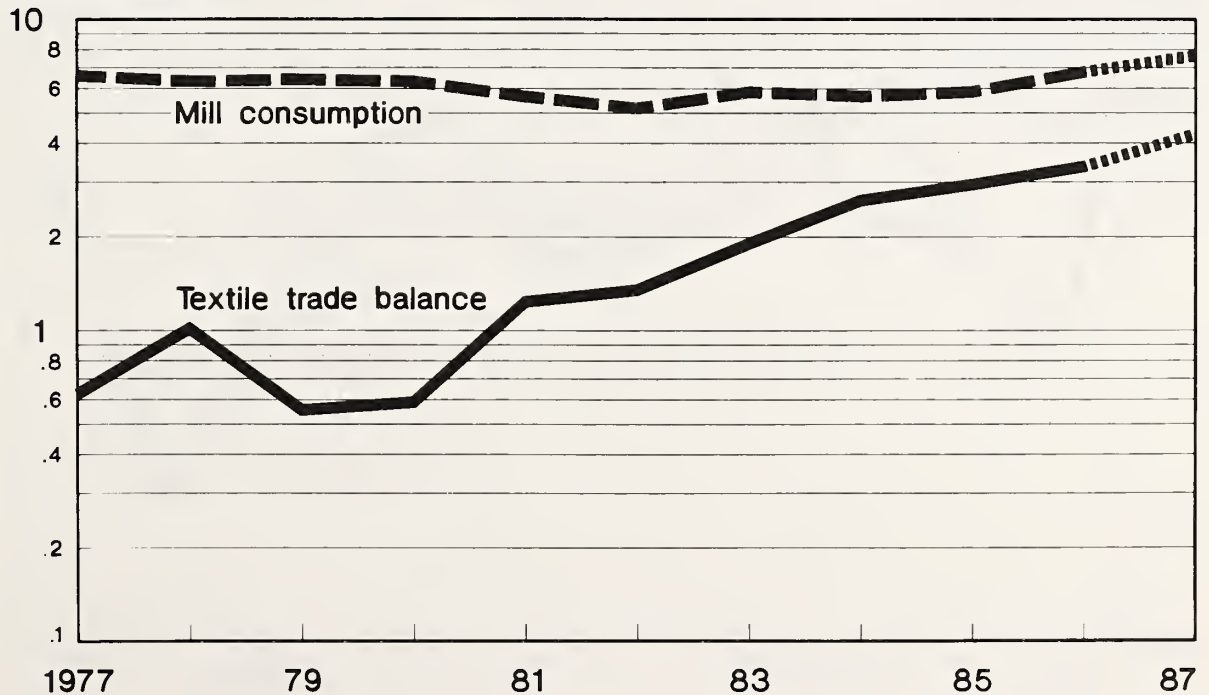


## Cotton Outlook

*Robert A. Skinner*

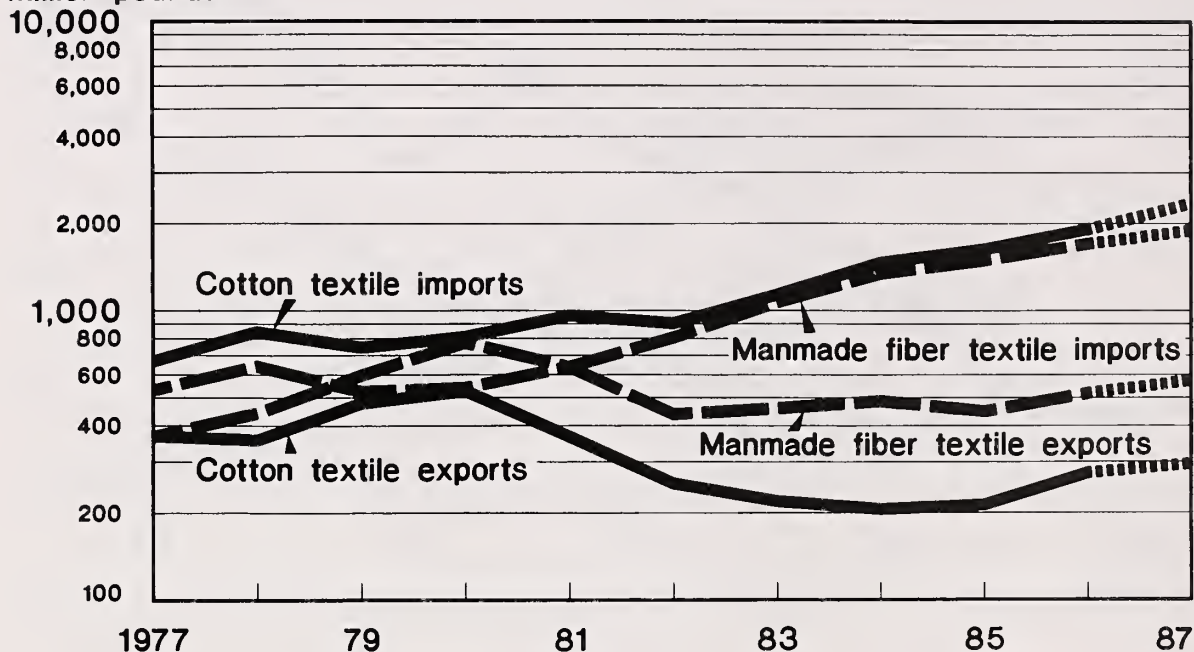
### U.S. Cotton Mill Consumption and Textile Trade Balance

Million bales



## Cotton and Manmade Fiber Textile Imports and Exports

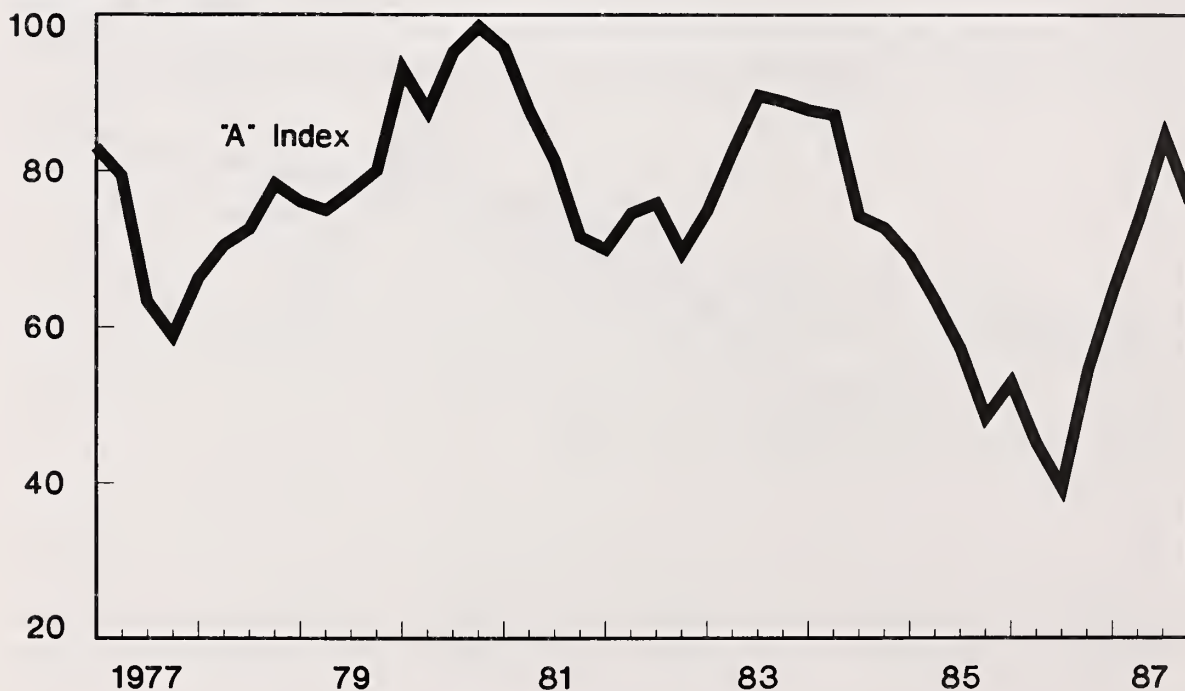
Million pounds\*



\* Raw fiber equivalent.

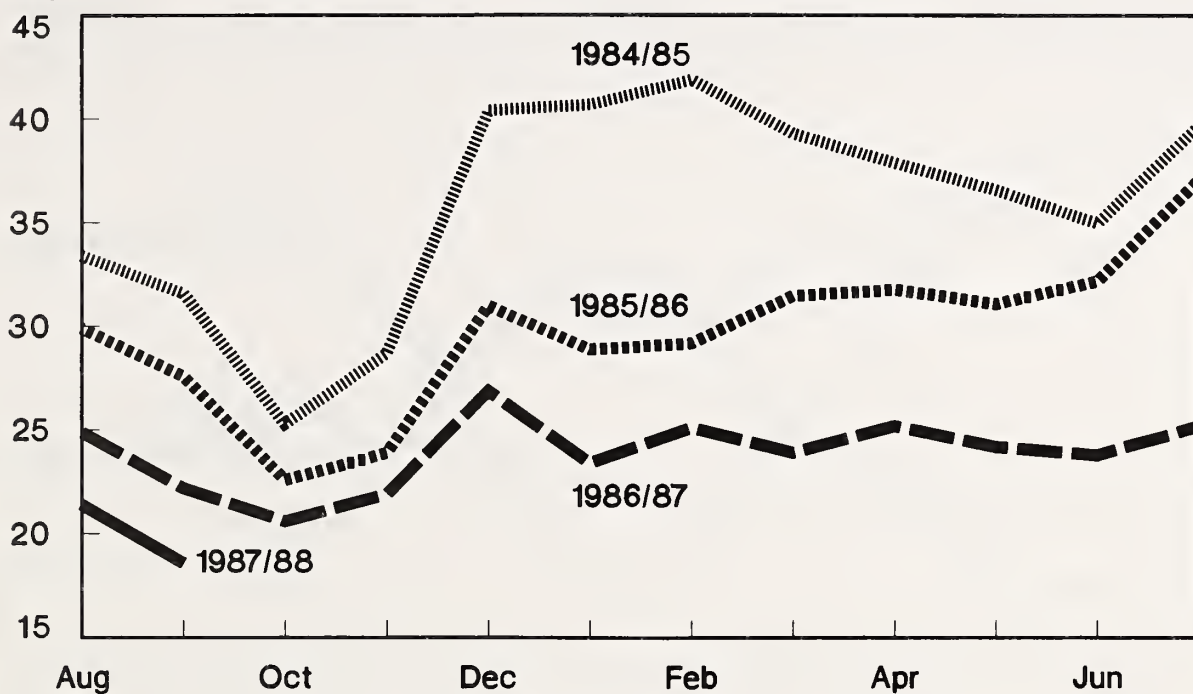
## World Cotton Prices

Cents per pound



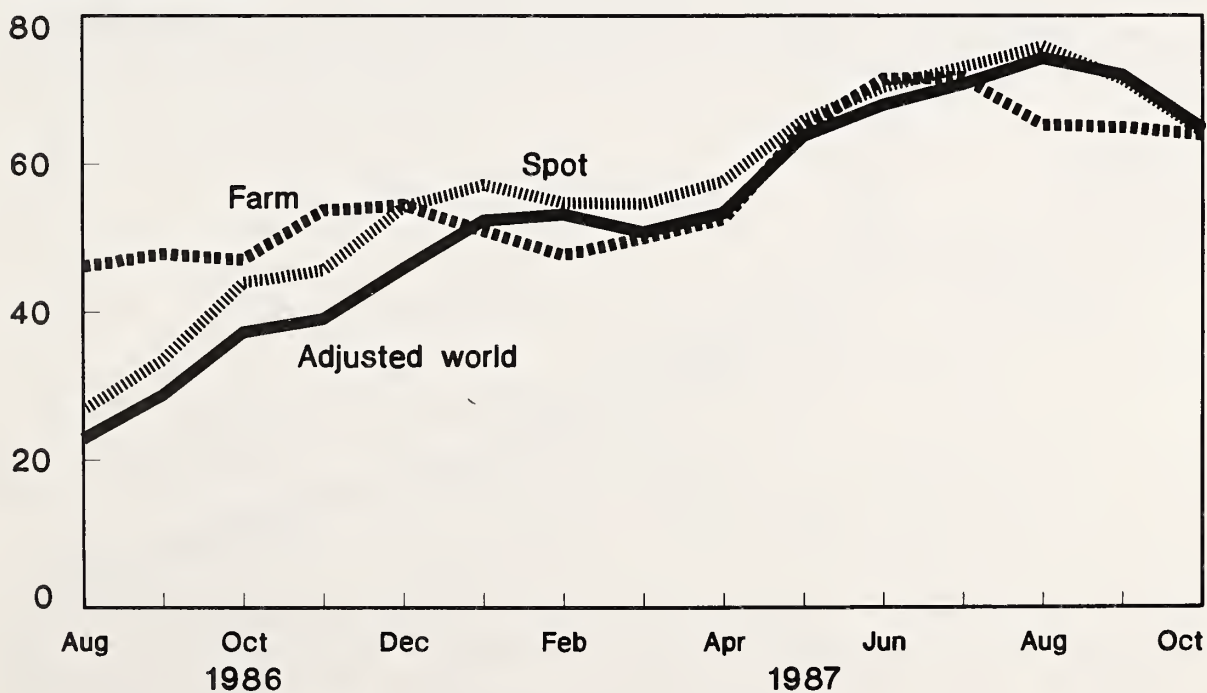
## Mill Inventory-to-Use Ratio

Days



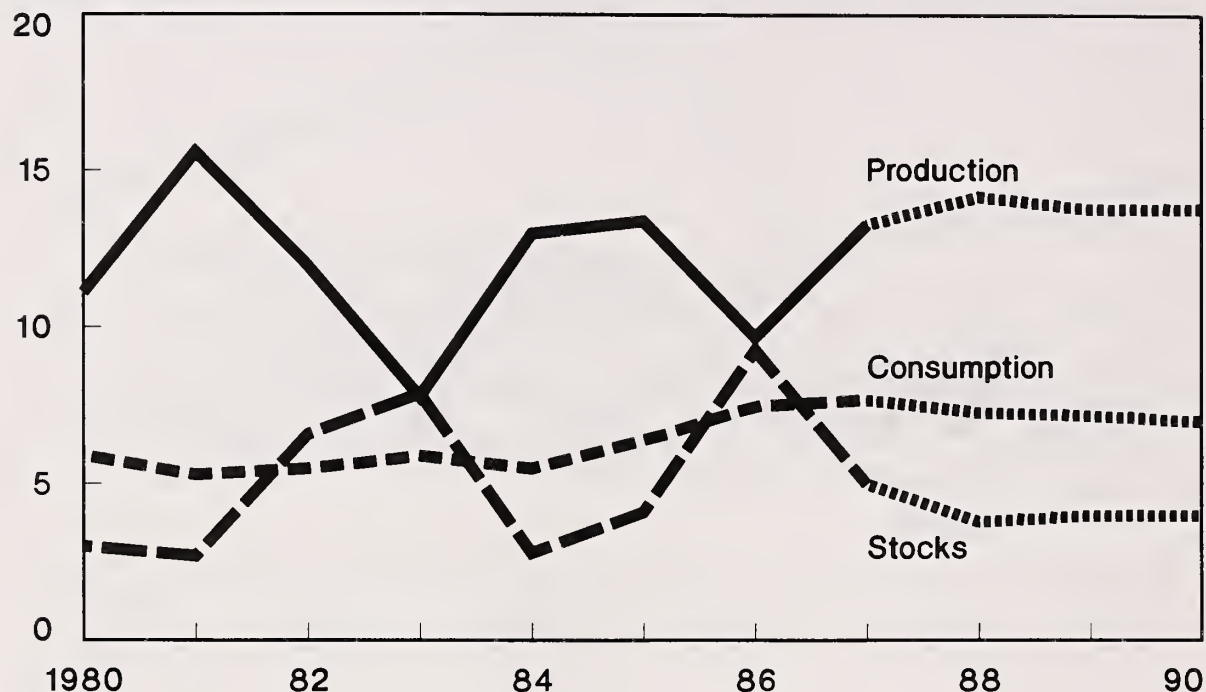
## U.S. Cotton Prices

Cents per pound



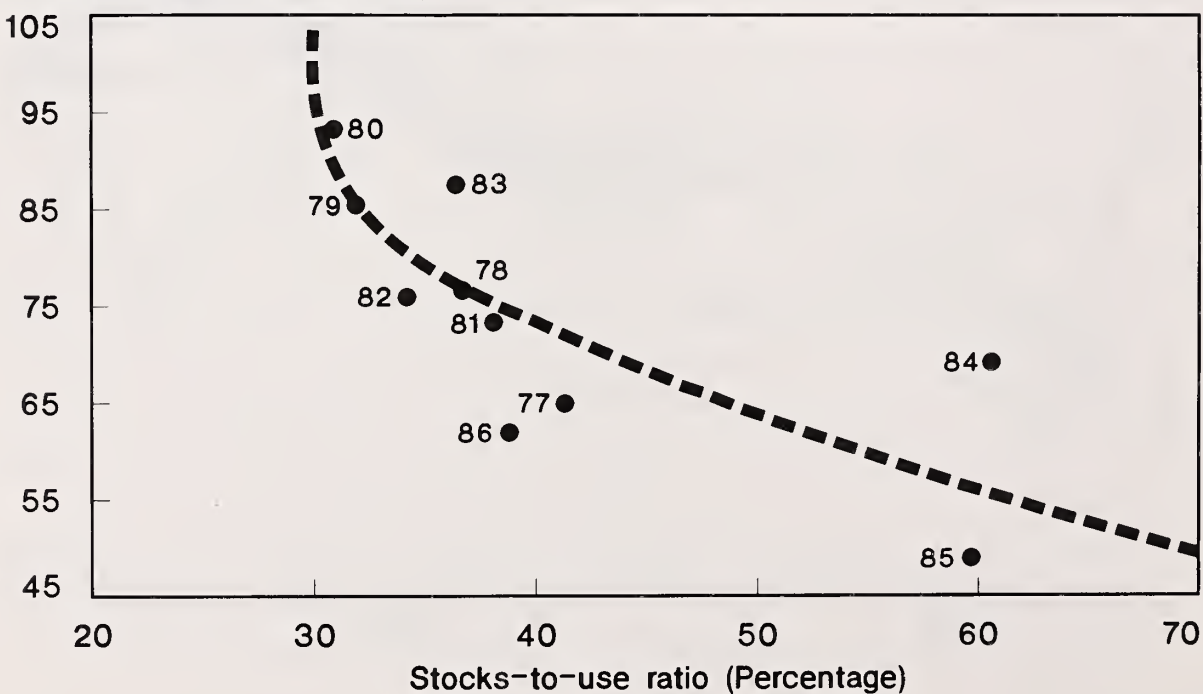
## U.S. Cotton Production, Consumption, and Stocks

Million bales



## World Cotton Prices and Stocks-to-Use Ratio

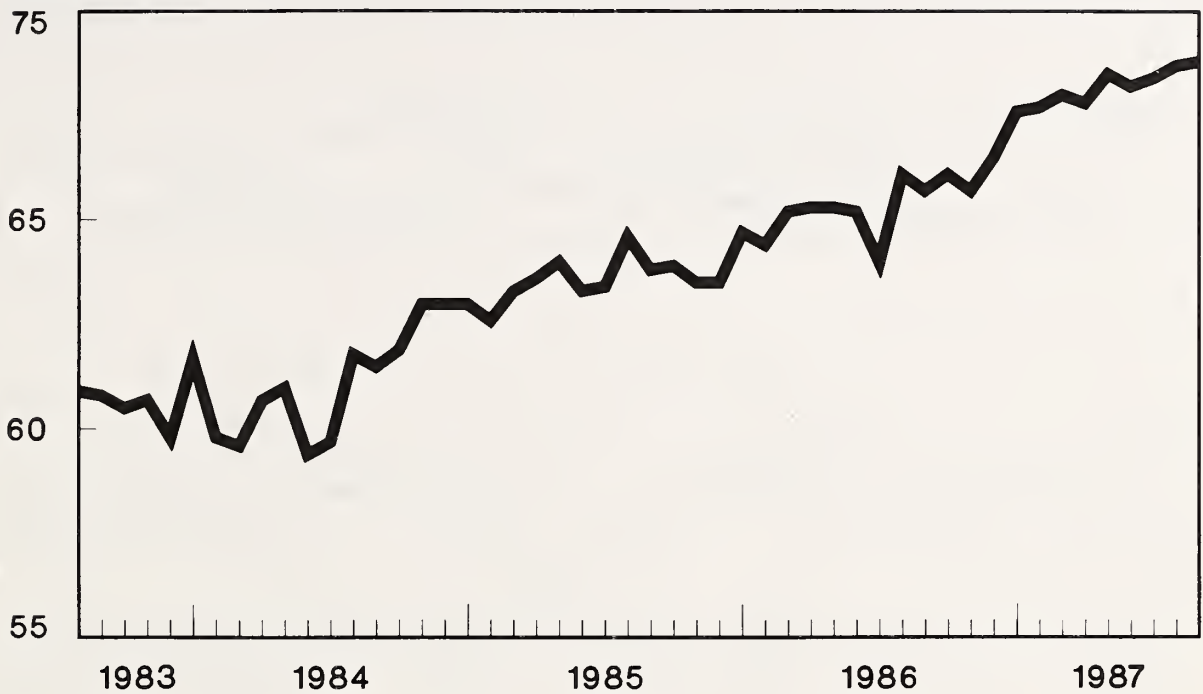
"A" Index (Cents per pound)





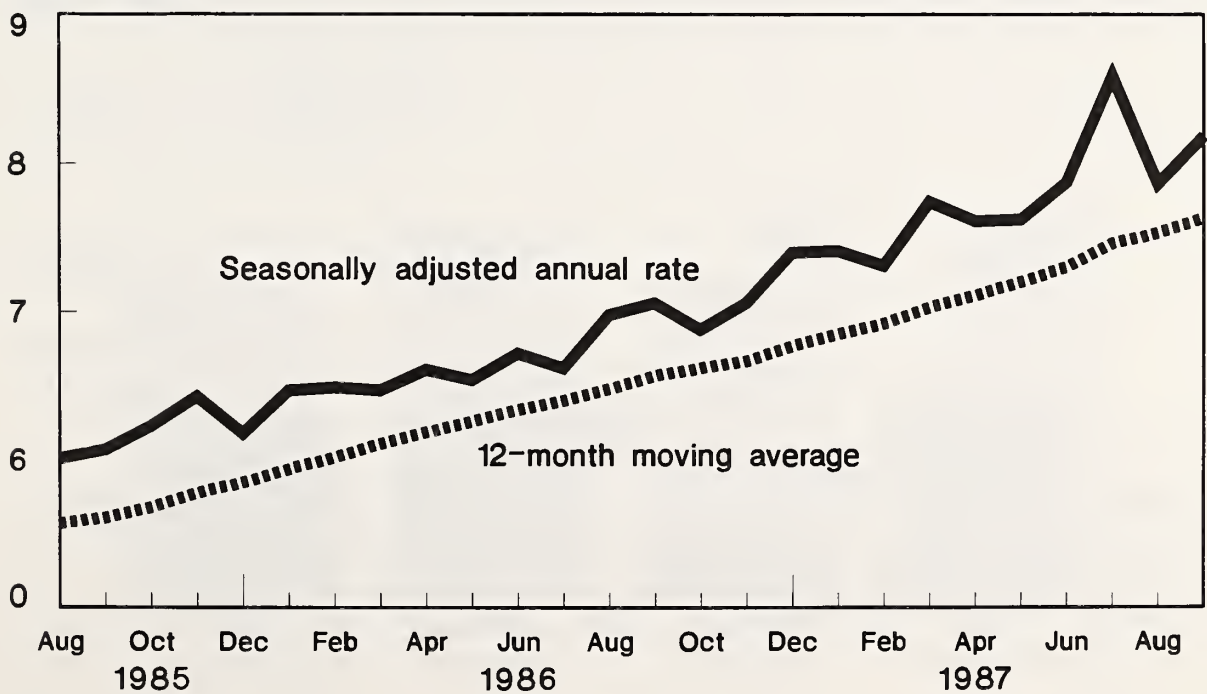
## Cotton's Share of Fibers on Cotton System

Percent



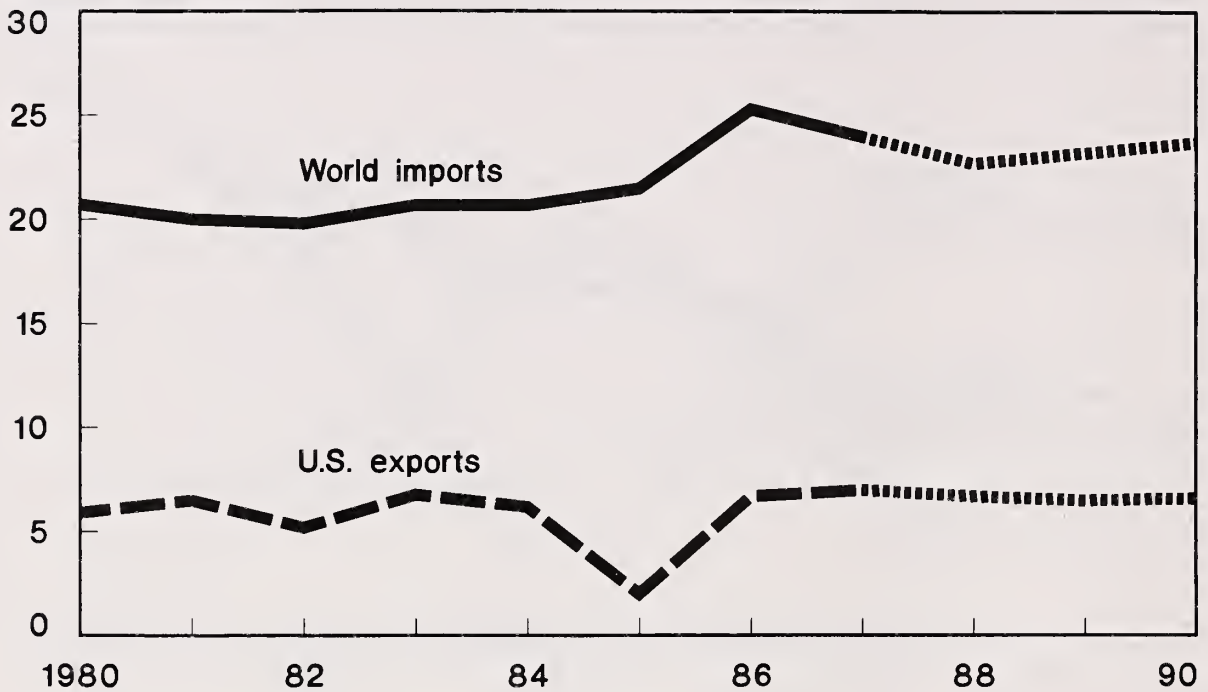
## U.S. Mill Consumption

Million bales

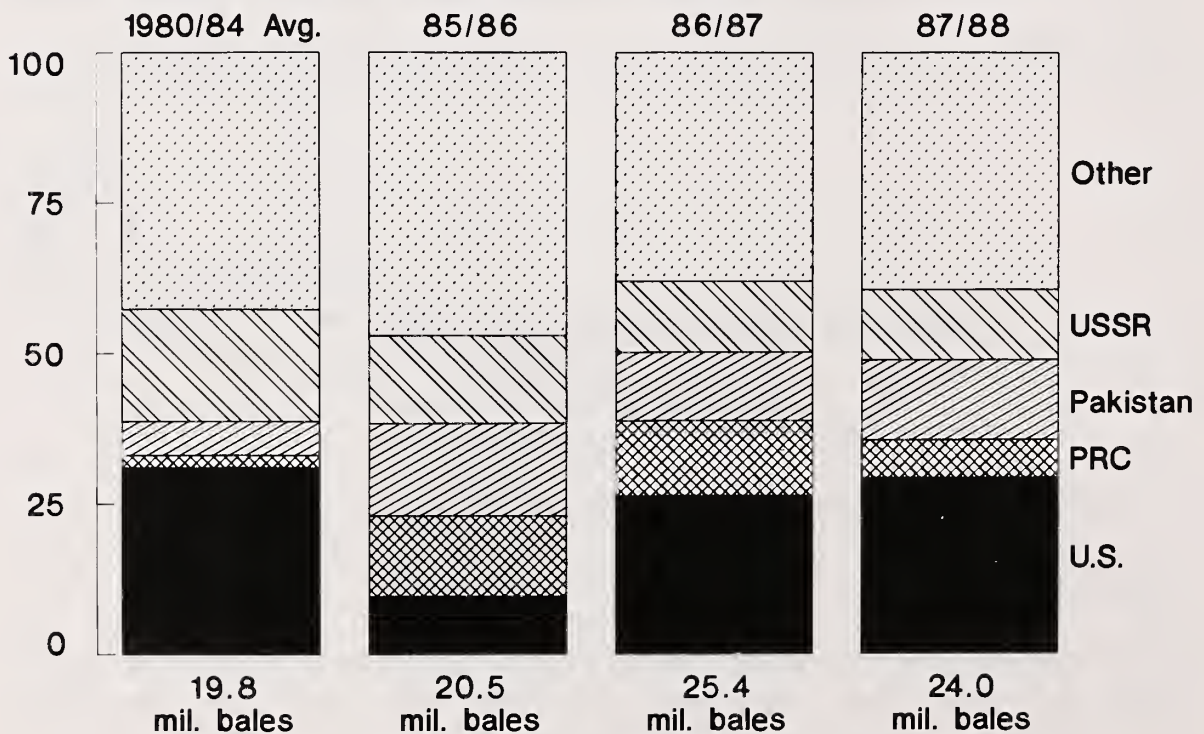


## World Imports and U.S. Exports of Raw Cotton

Million bales

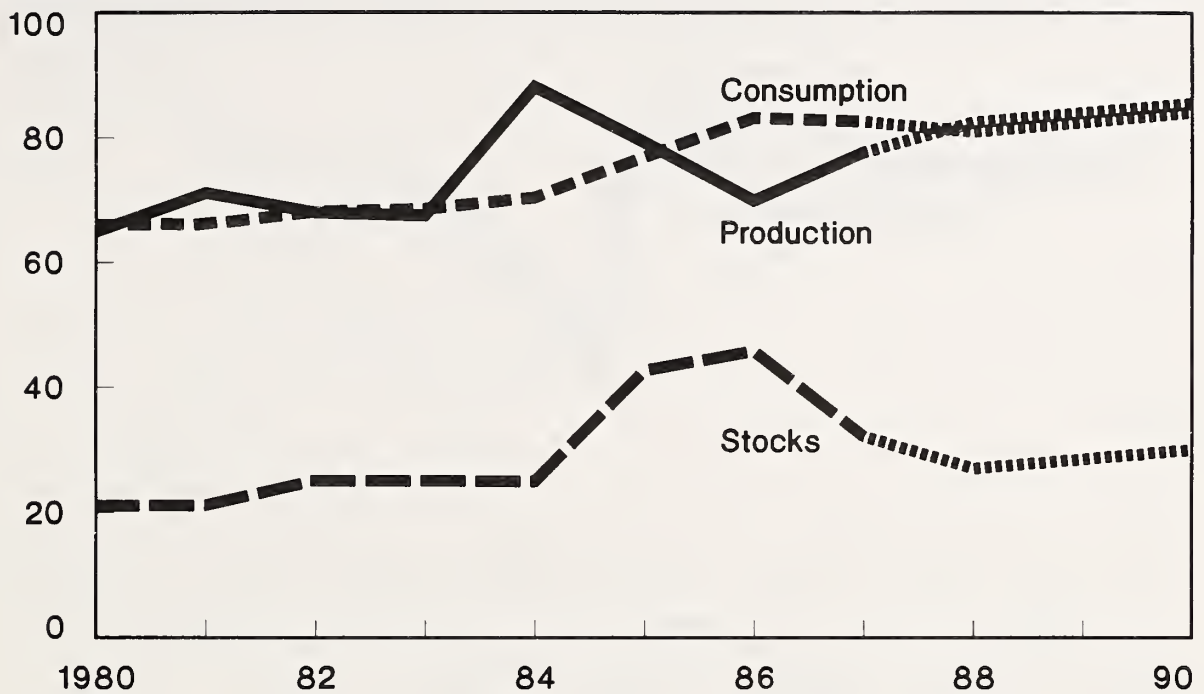


## World Cotton Trade and Export Shares



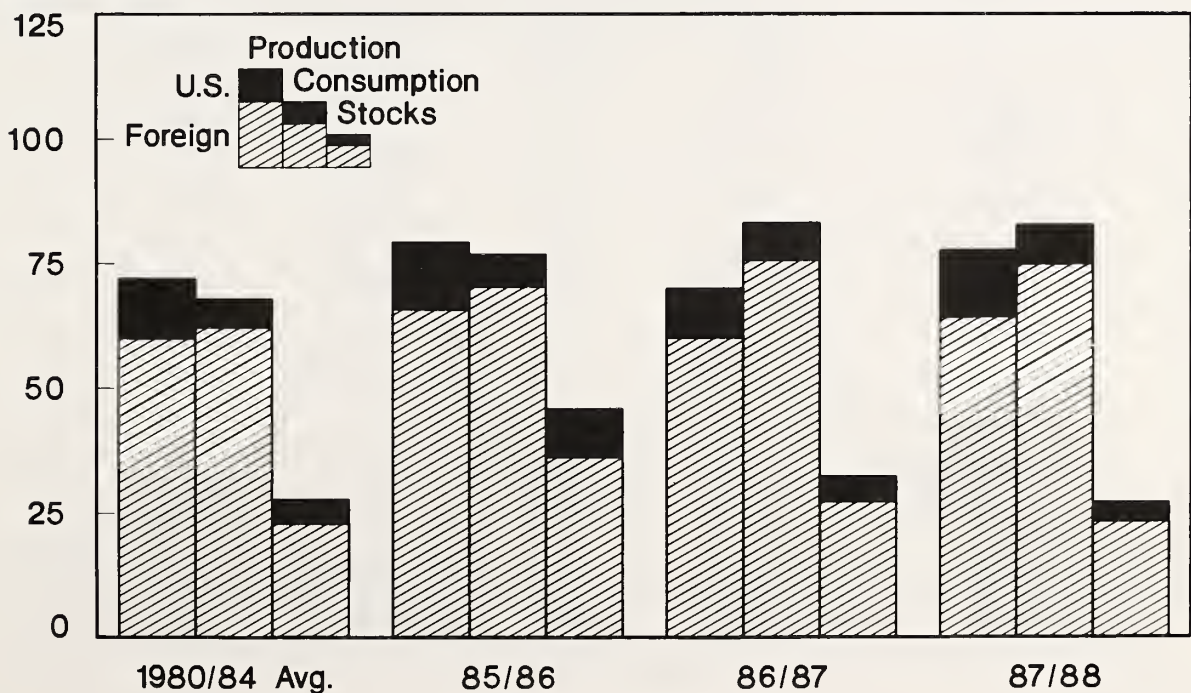
## World Cotton Production, Consumption, and Stocks

Million bales



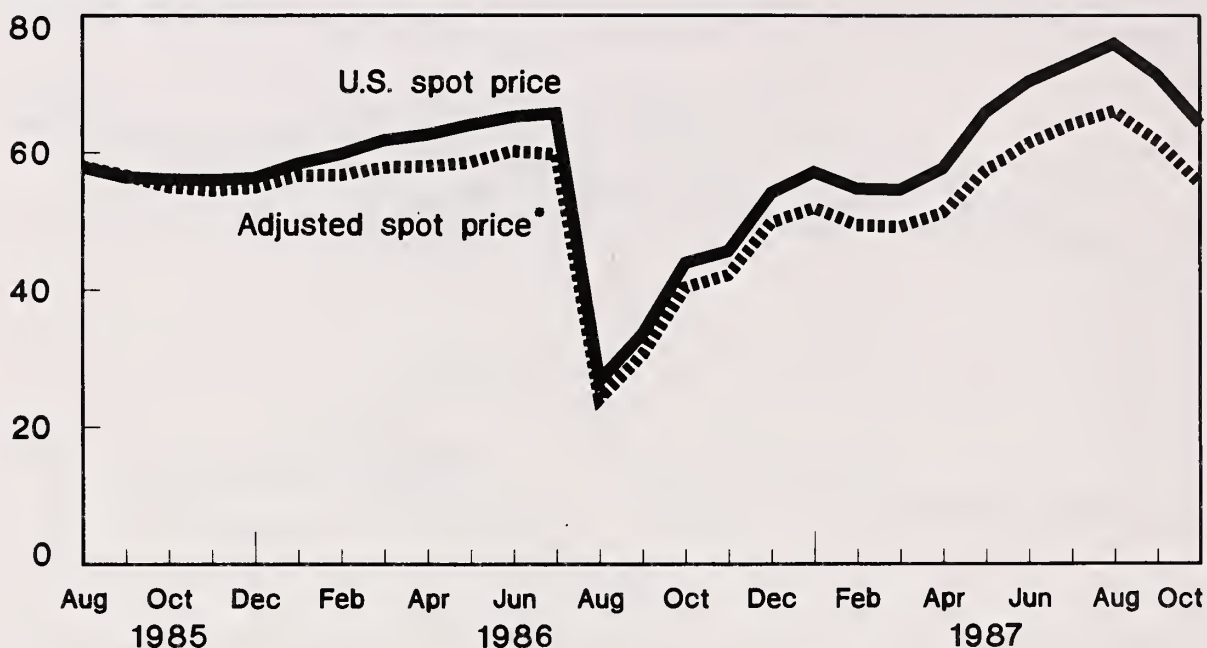
## World Cotton Production, Consumption, and Stocks

Million bales



## U.S. Spot Prices

Cents per pound



\* Adjusted by trade weighted exchange rate index (April 1971=100).

## U.S. Cotton Exports to Selected Countries

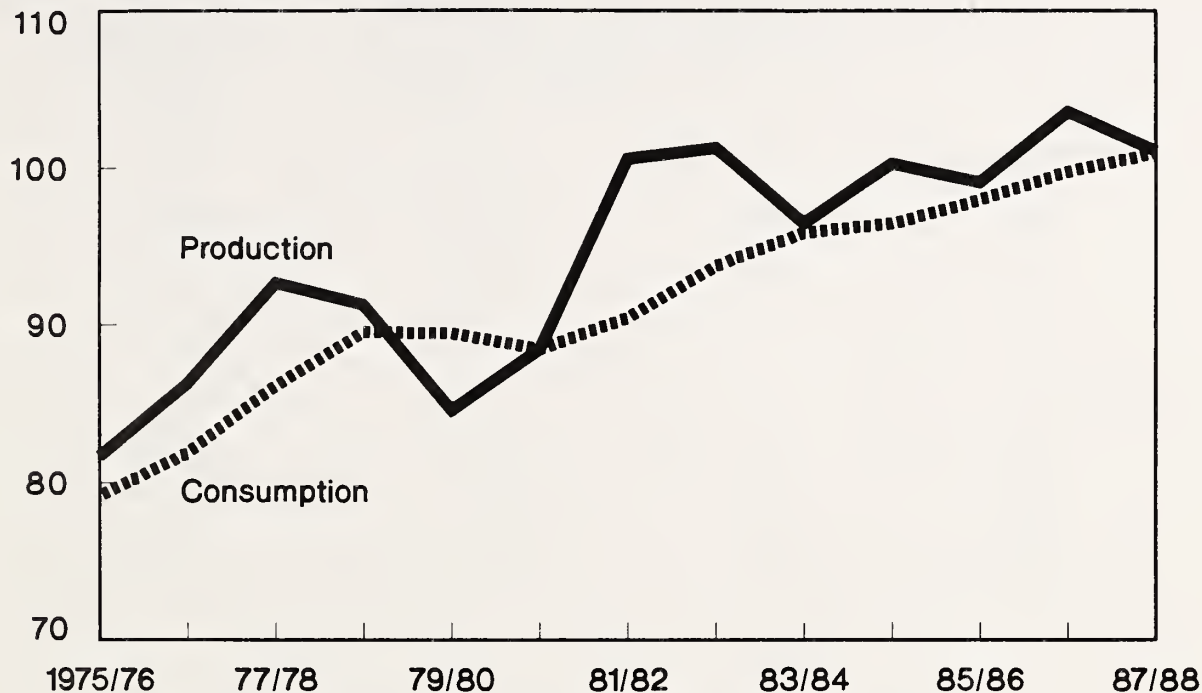
Country	1980-84 average		1986/87	
	Thousand bales	Market share(%)	Thousand bales	Market share(%)
Japan	1,442	44	1,723	48
Korea	1,319	85	1,330	70
Taiwan	513	46	907	40
Hong Kong	207	26	52	4
Italy	169	16	263	18
France	91	11	114	9
Germany	99	11	263	20
Portugal	62	10	76	10
Indonesia	286	55	324	41
Thailand	202	47	239	19
Other	1,704	--	1,395	--
World	6,140	31	6,684	26





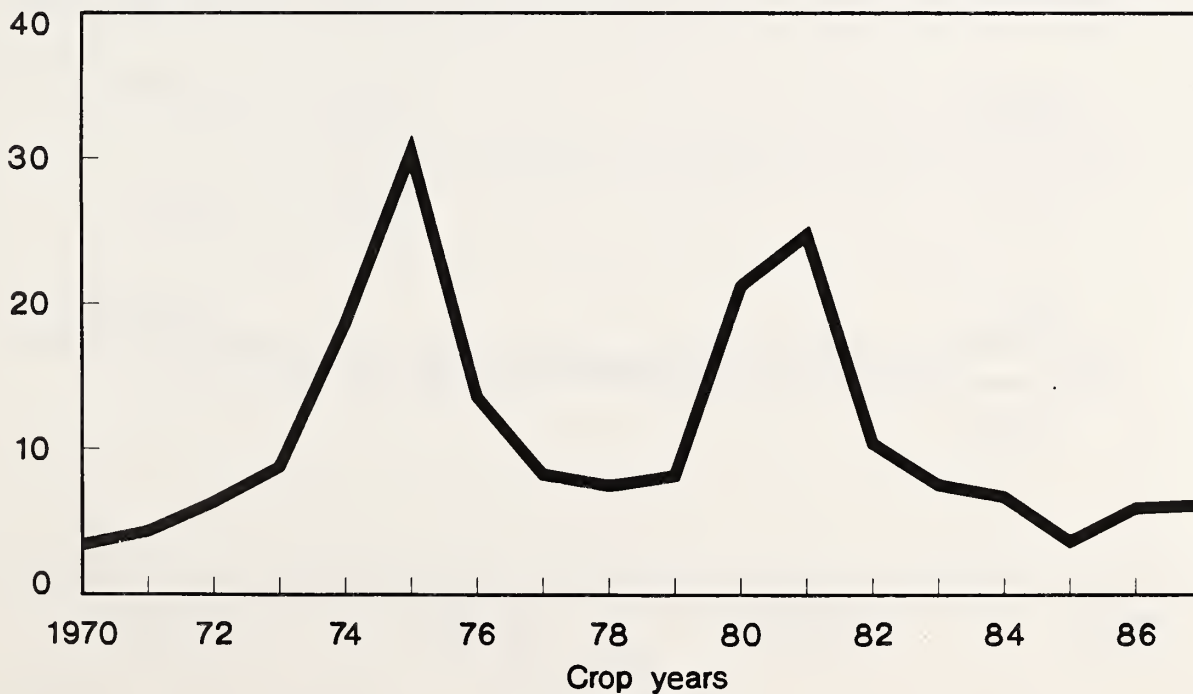
## World Sugar: Production and Consumption

Million metric tons, raw value



## World Raw Sugar Prices

Cents per pound

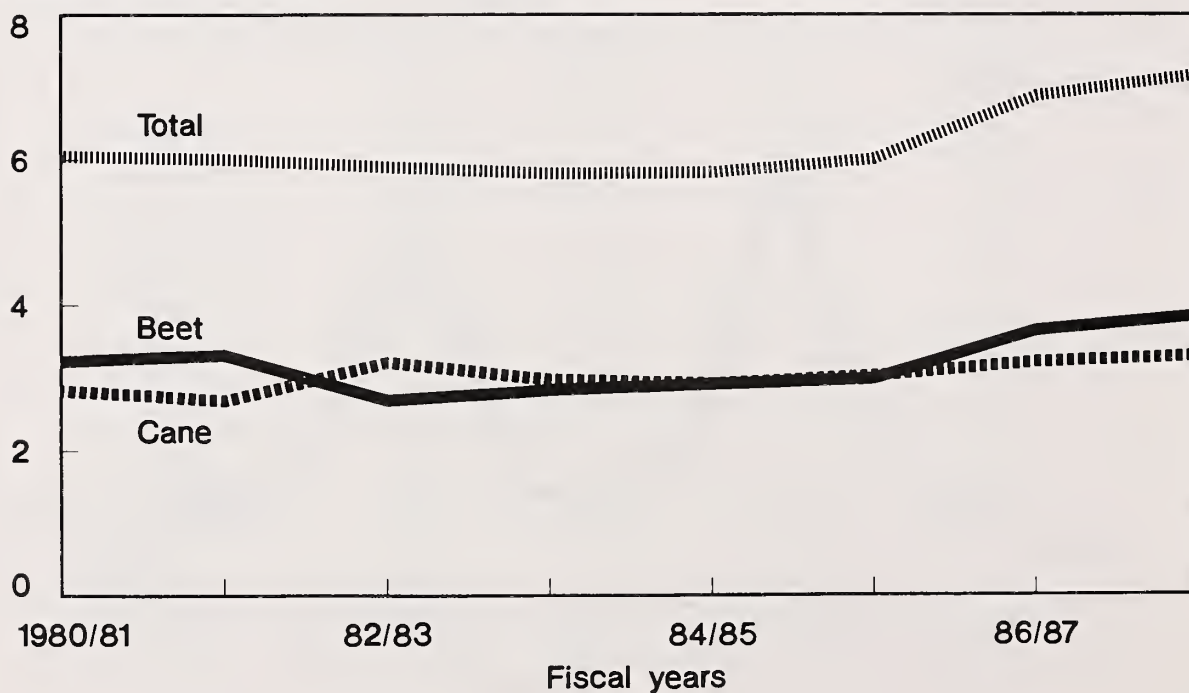


## U.S. Sugar: Area, Yield, and Production

	Area	Yield	Production
	1,000 acres	Short tons per acre (Sugarbeets or sugarcane)	1,000 short tons (Sugar)
<b>Beet</b>			
1982-85	1,070	2.65	2,835
1986	1,191	2.87	3,414
1987	1,248	3.08	3,850
<b>Cane</b>			
1982-85	714	4.21	3,008
1986	751	4.37	3,281
1987	783	4.25	3,325

## U.S. Sugar Production

Million tons, raw value



## Returns to Management and Risk

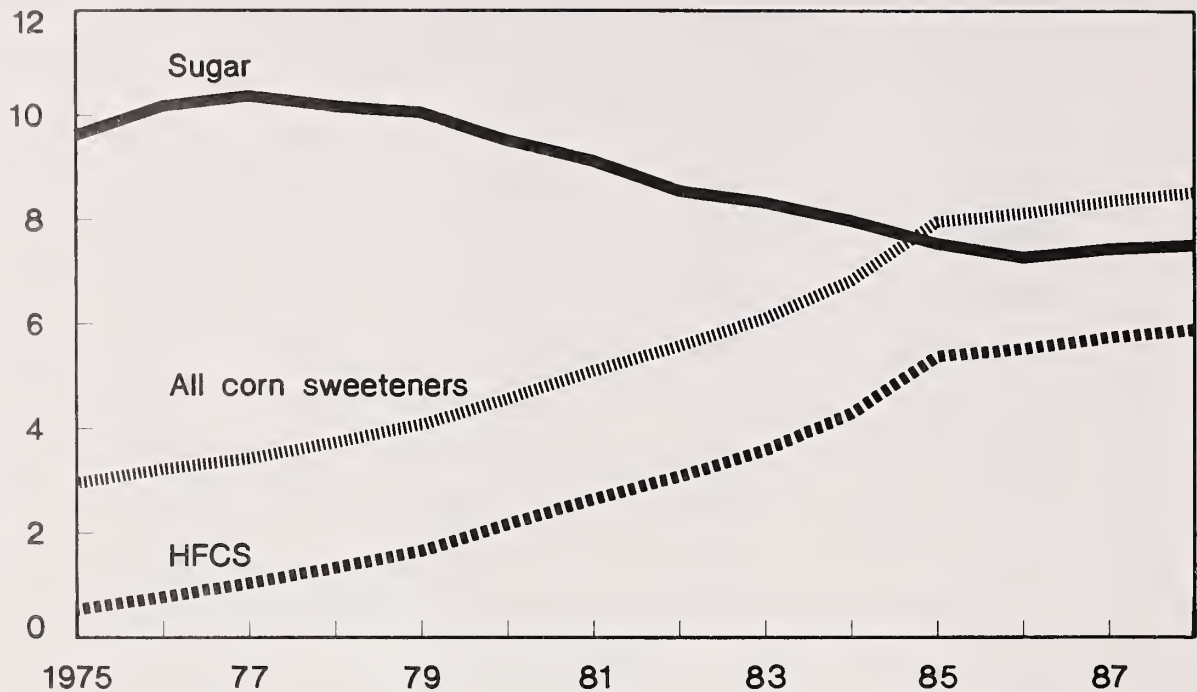
	1984 crop	1985 crop	1986 crop
	Dollars an acre		
Barley	-26	-43	-49
Corn	-16	-24	-75
Cotton	-35	-38	-75
Soybeans	-10	-7	-10
Sugarbeets	92	107	176
Sugarcane	-90	-96	-18
Wheat	-17	-28	-40

## Sugar and Corn Sweetener Deliveries

	Peak year	1980	1985	1987	1988
	Million tons				
Sugar	11.1 (1977)	10.2	8.1	8.0	8.0
HFCS	5.9 (1988)	2.2	5.4	5.8	5.9
All corn sweeteners	8.5 (1988)	4.6	8.0	8.4	8.5

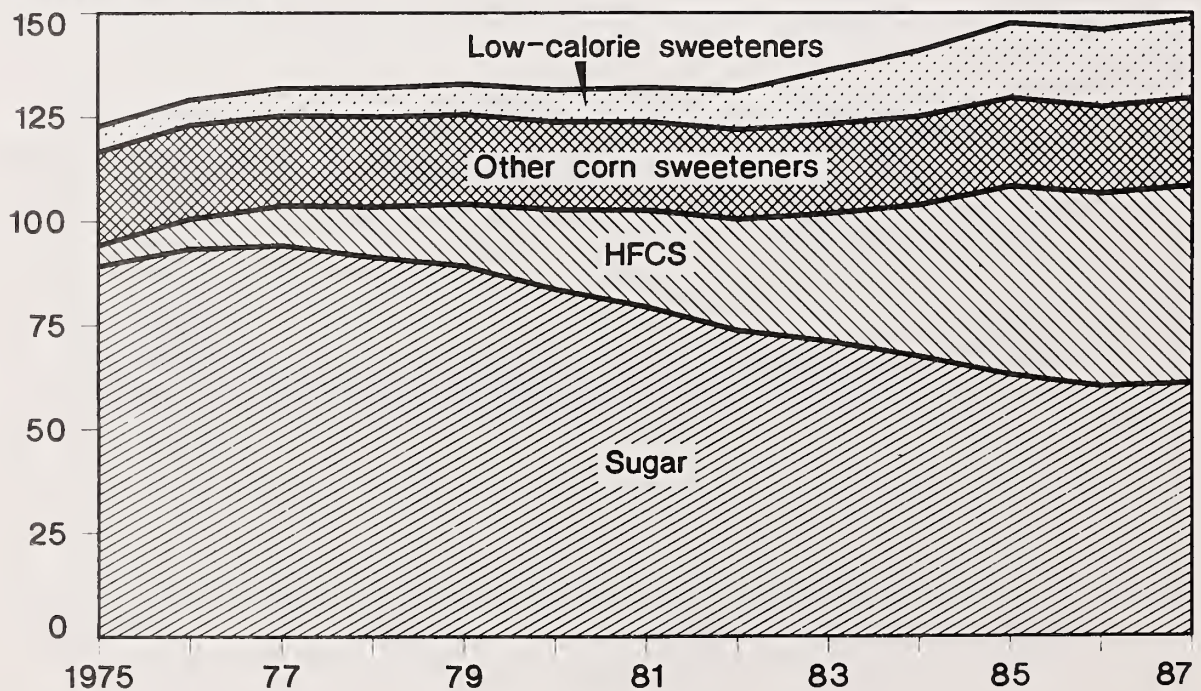
## U.S. Sugar and Corn Sweetener Deliveries

Million tons



## U.S. Sweetener Consumption

Pounds per capita





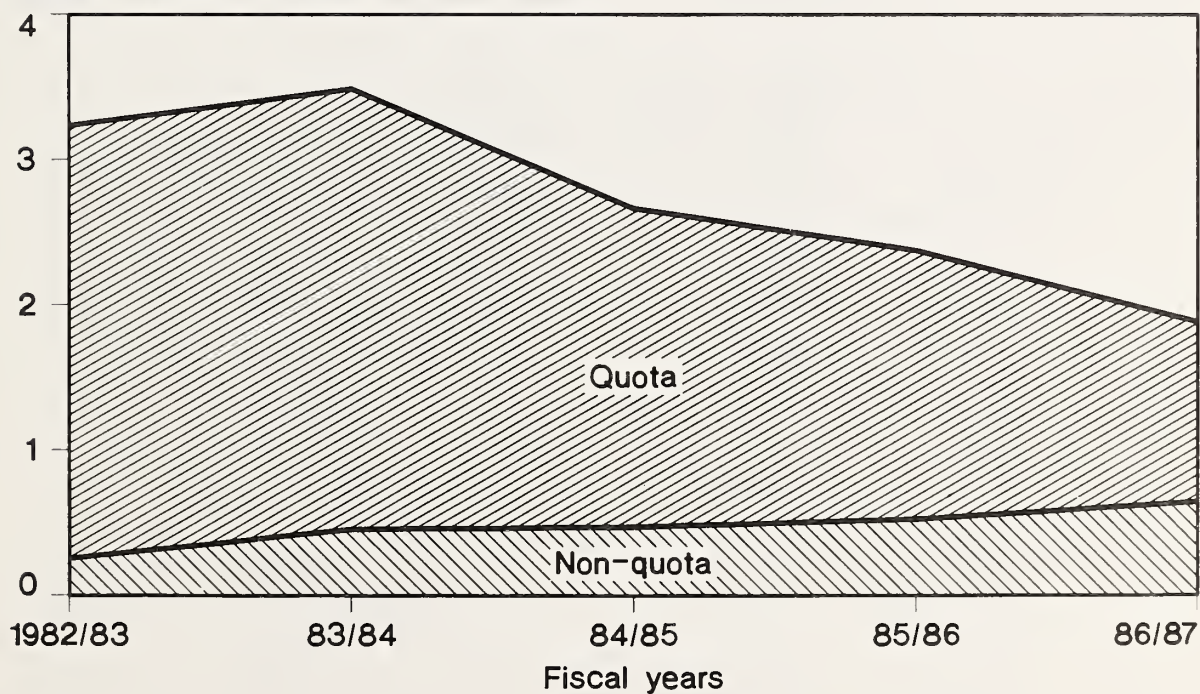
## U.S. Imports of Raw Sugar

Fiscal year	1,000 tons, raw value
1980	4,874
1982	3,603
1984	3,490
1986	2,378
1987	1,884

Note: Sugar quota started May 1982.

## U.S. Sugar Imports

Million tons, raw value



### **U.S. Prices for Raw Sugar (New York)**

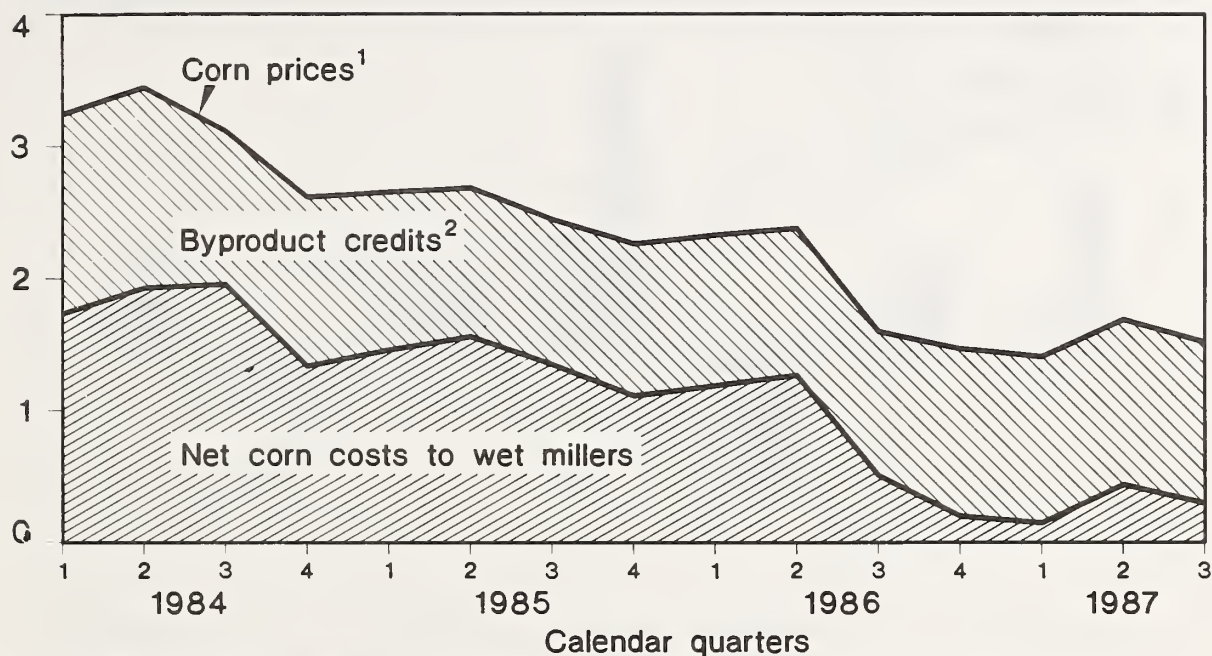
<b>Fiscal year</b>	<b>High</b>	<b>Low</b>	<b>Average</b>	<b>MSP</b>
1982	22.45	15.66	18.84	19.88
1983	22.59	20.44	21.76	20.78
1984	22.06	21.47	21.84	21.17
1985	21.56	19.51	20.89	21.57
1986	21.01	18.68	20.46	21.50
1987	22.07	21.08	21.68	21.78

### **U.S. Average Retail Price for Sugar**

<b>Fiscal year</b>	<b>Cents a pound</b>
1982	33.7
1983	35.8
1984	36.4
1985	35.7
1986	35.1
1987	35.0

## Net Corn Costs

\$ per bu.



1/ No. 2 yellow corn, central Illinois.

2/ Sales of corn oil and corn gluten feed and meal.

## U.S. Sugar Supply and Use

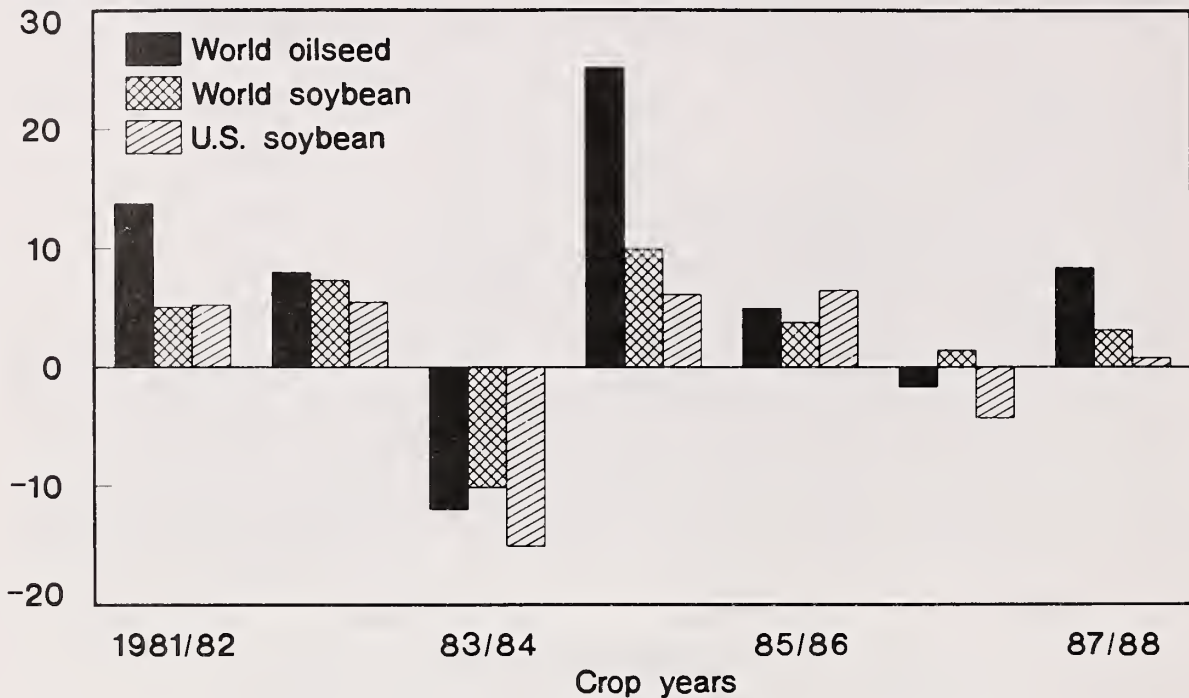
	1986/87	1987/88
1,000 short tons, raw value		
Beginning stocks	1,652	1,514
Production	6,886	7,175
Imports total	1,884	---
Quota	1,237	---
Other	647	510
Total Supply	10,422	---
Exports	597	405
CCC disposal	177	0
Domestic deliveries	7,998	8,100
Other	136	50
Total Use	8,908	8,555
Ending stocks	1,514	---

Fiscal years.



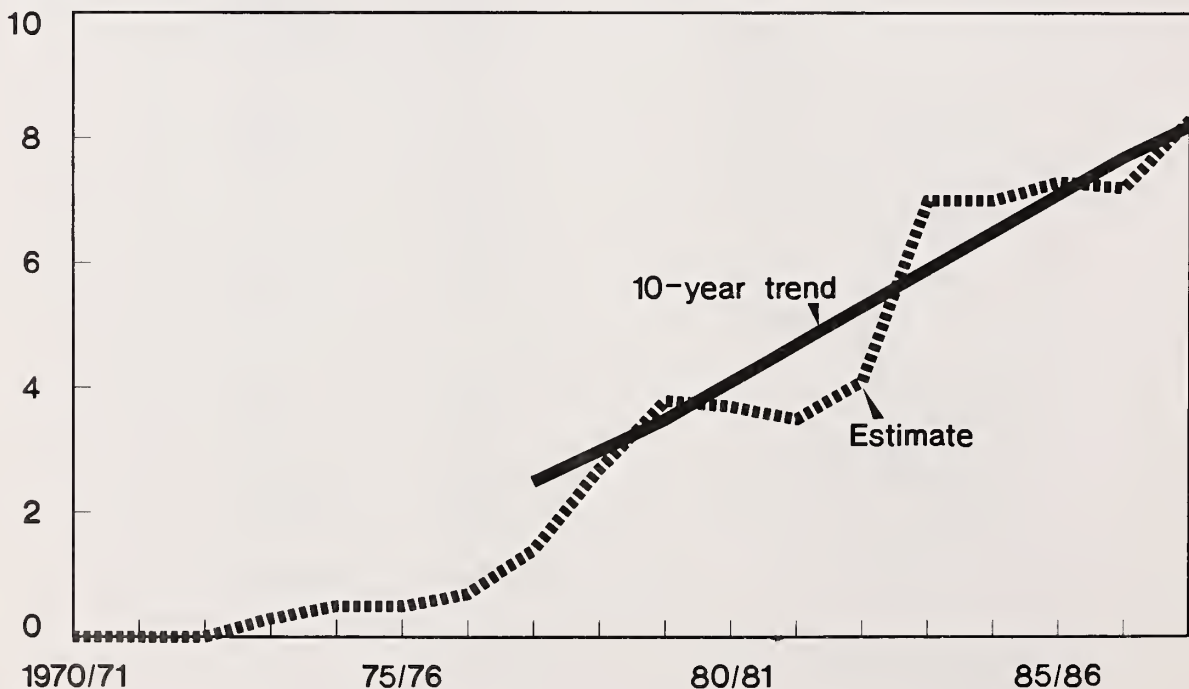
## Annual Change in Oilseed and Soybean Production

Million metric tons



## Argentine Soybean Production

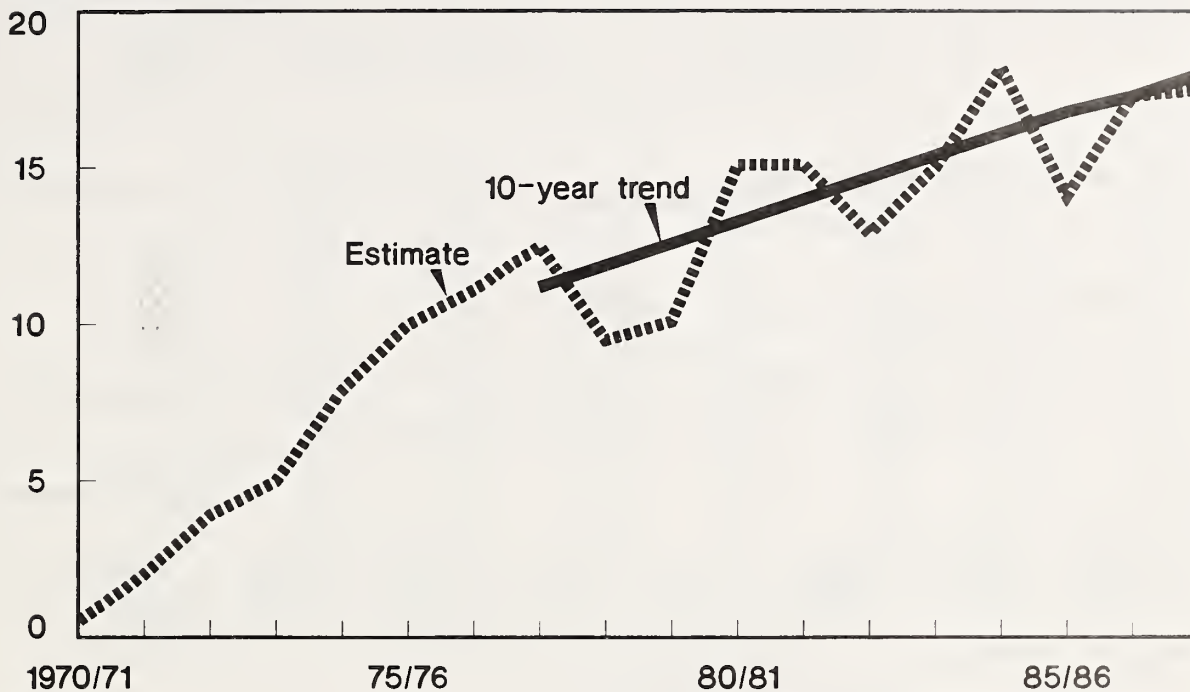
Million metric tons





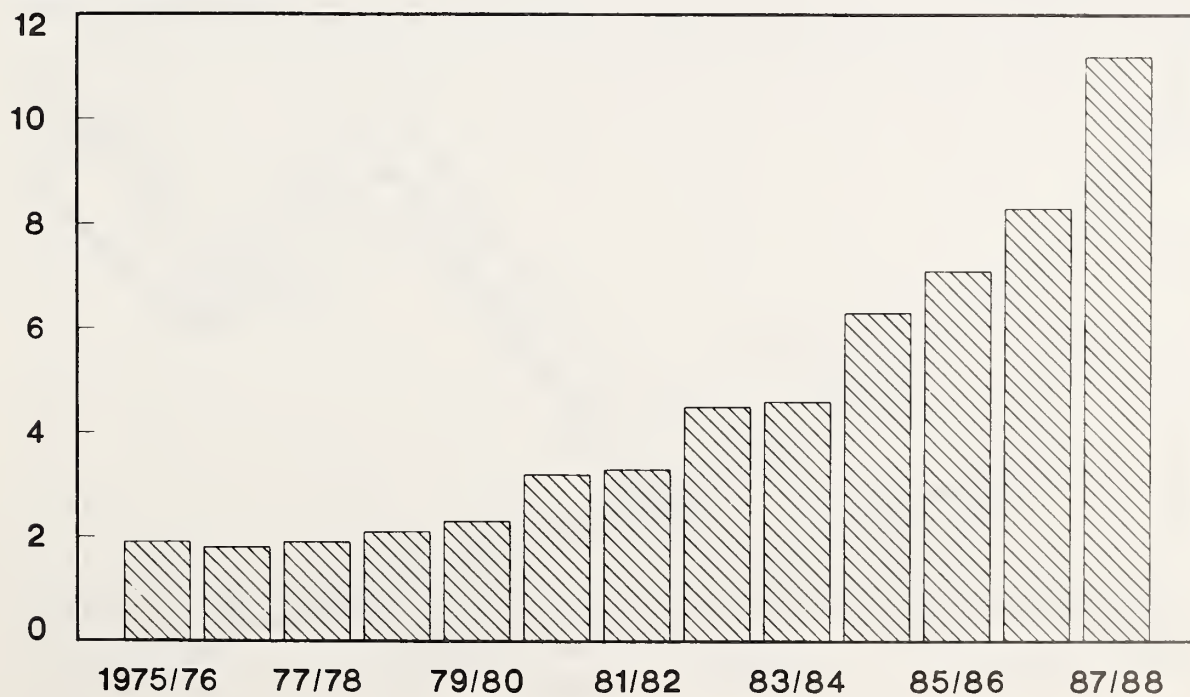
## Brazilian Soybean Production

Million metric tons



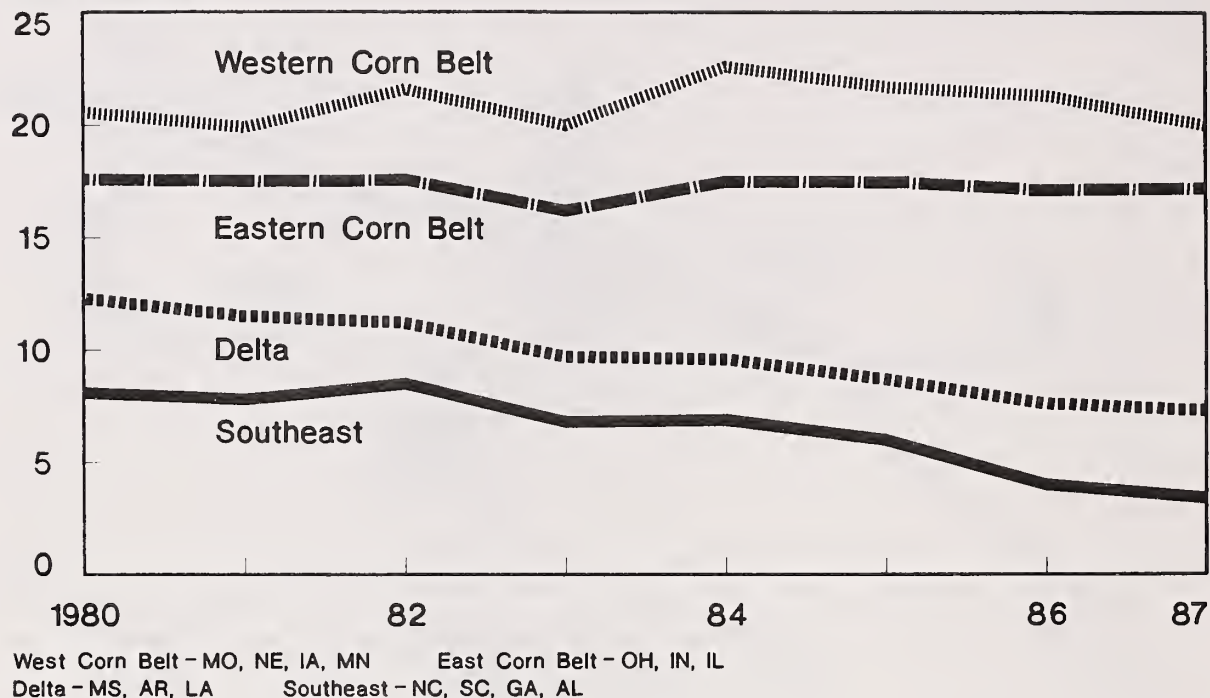
## EC-12 Oilseed Production

Million metric tons



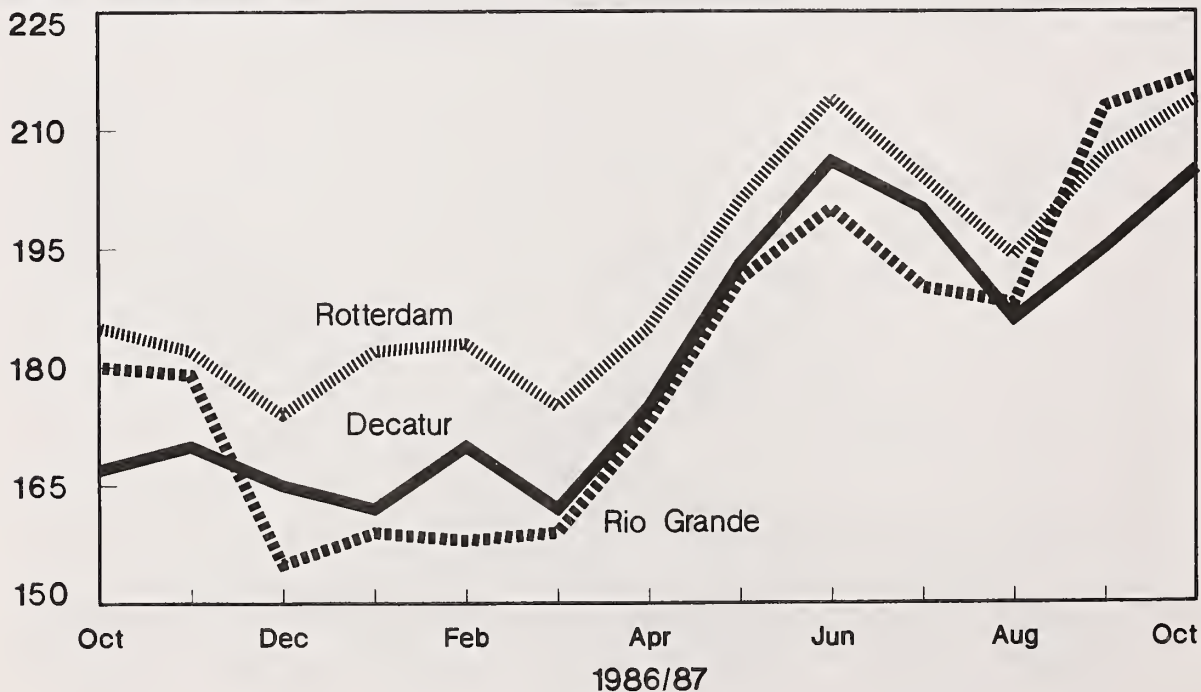
## Harvested Soybean Acreage

Million acres



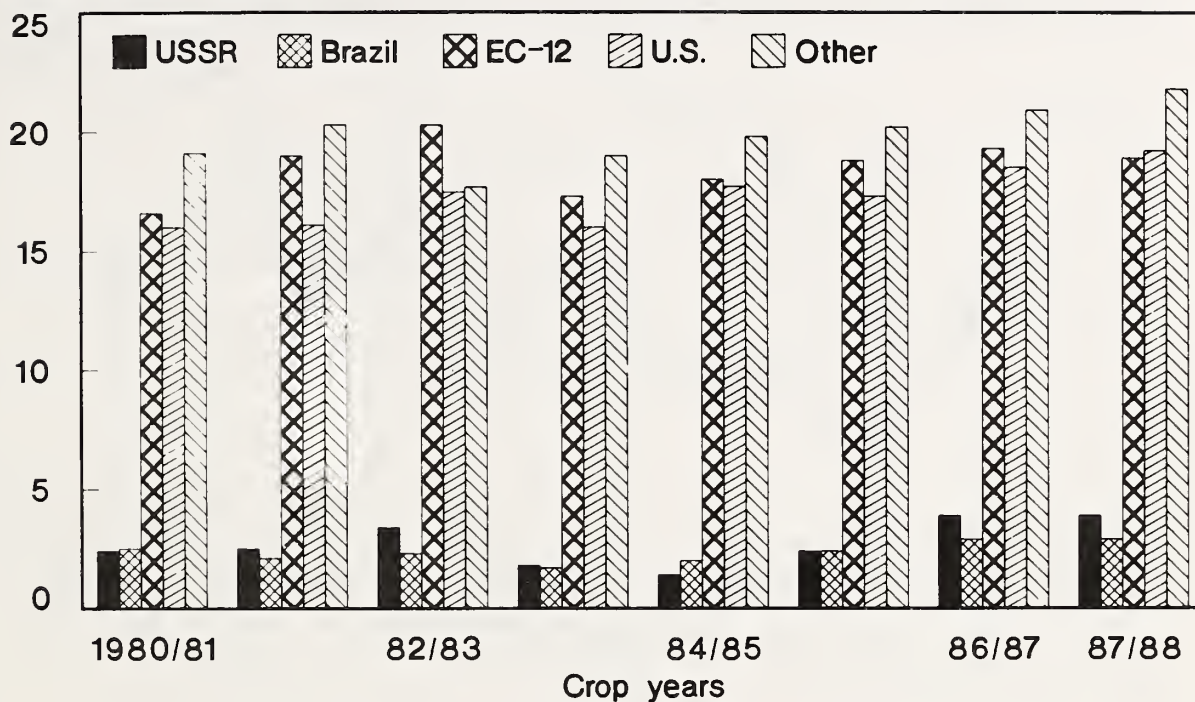
## Soybean Meal Prices

\$ per metric ton



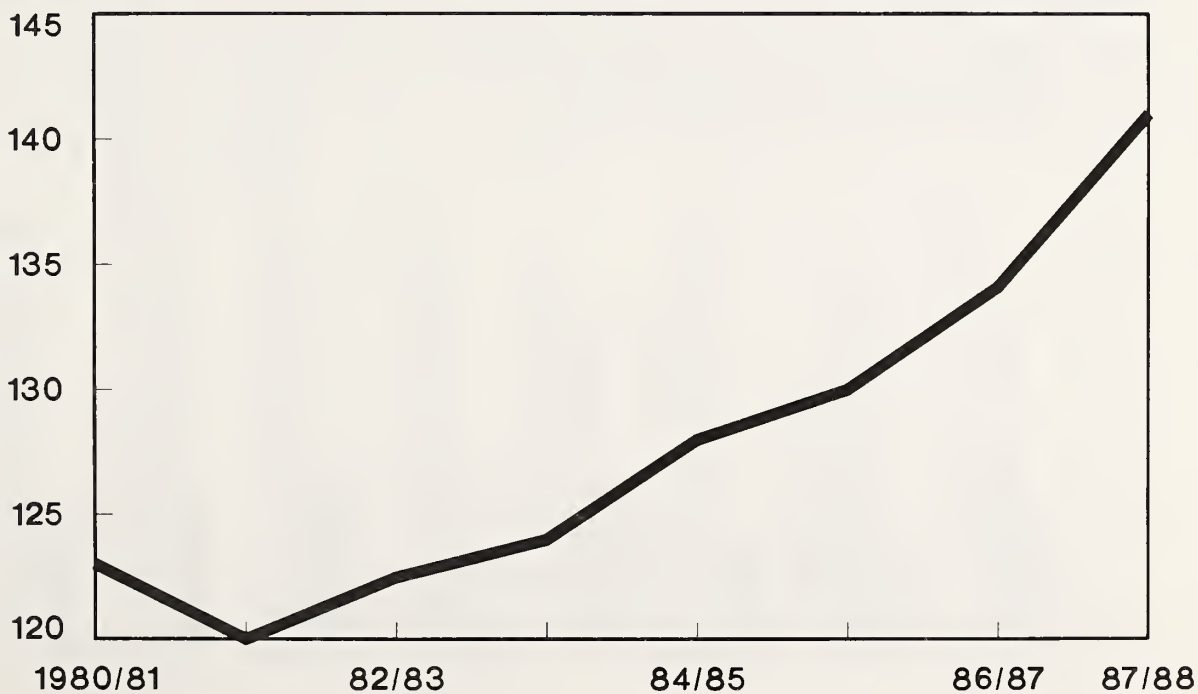
## World Soybean Meal Consumption

Million metric tons



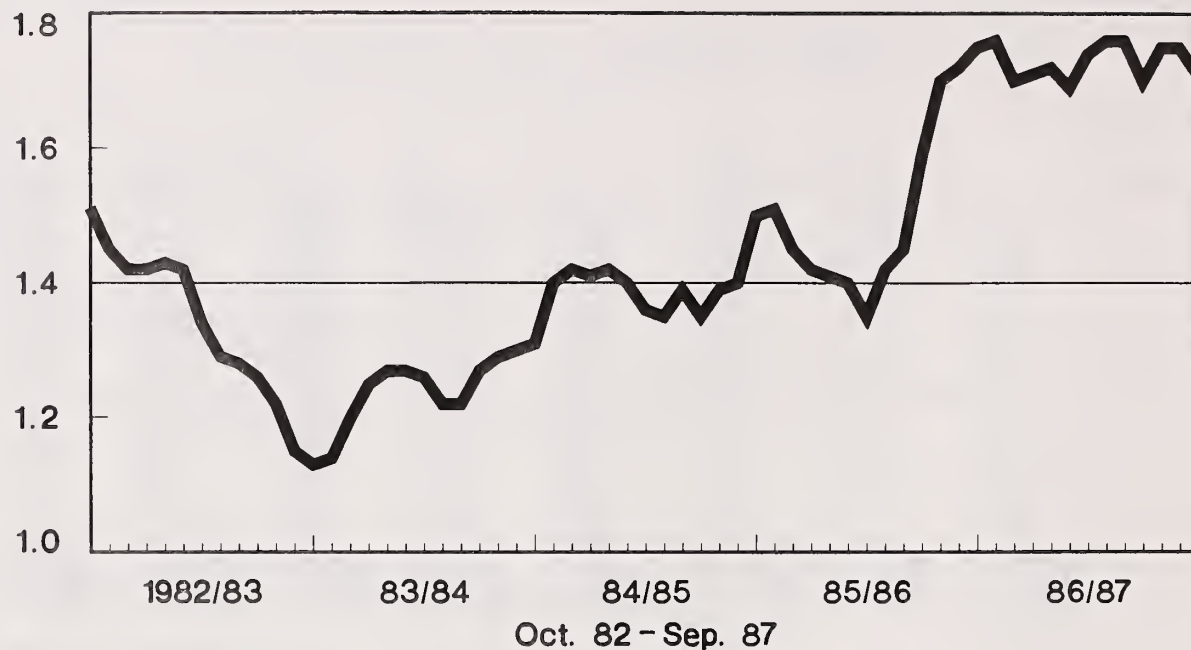
## Protein Units Index

% of 1975



## U.S. Feed Profitability Ratio

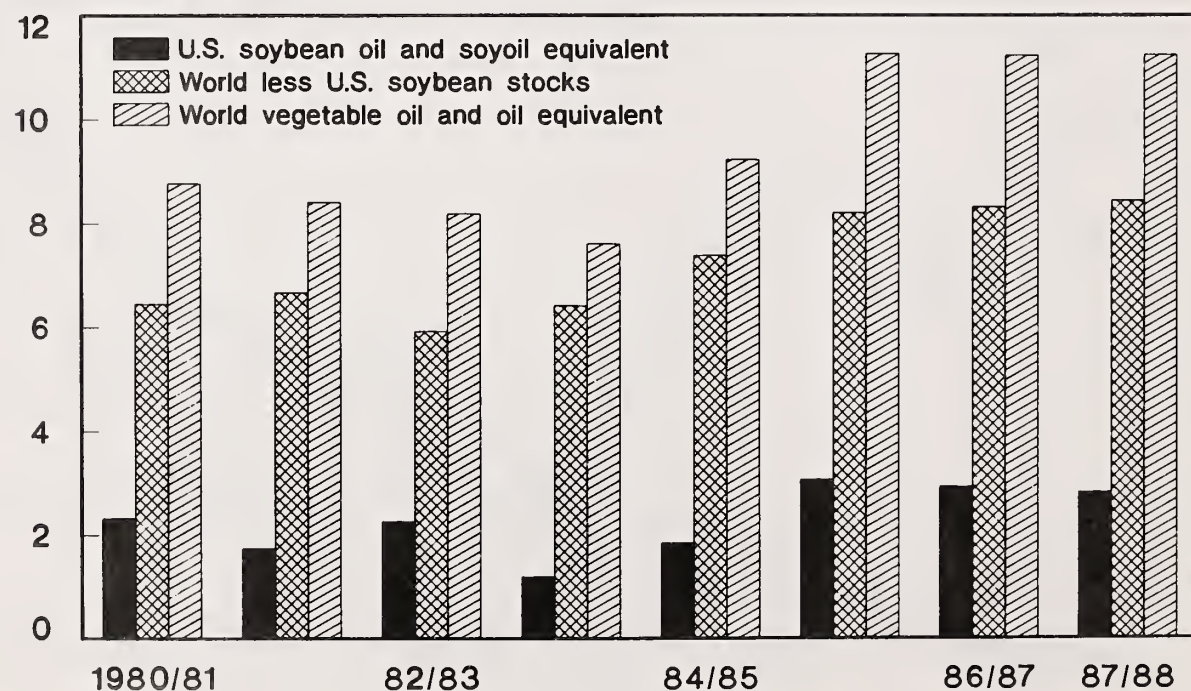
Ratio



1964/65-1984/85 average = 1.4.

## Ending Stocks

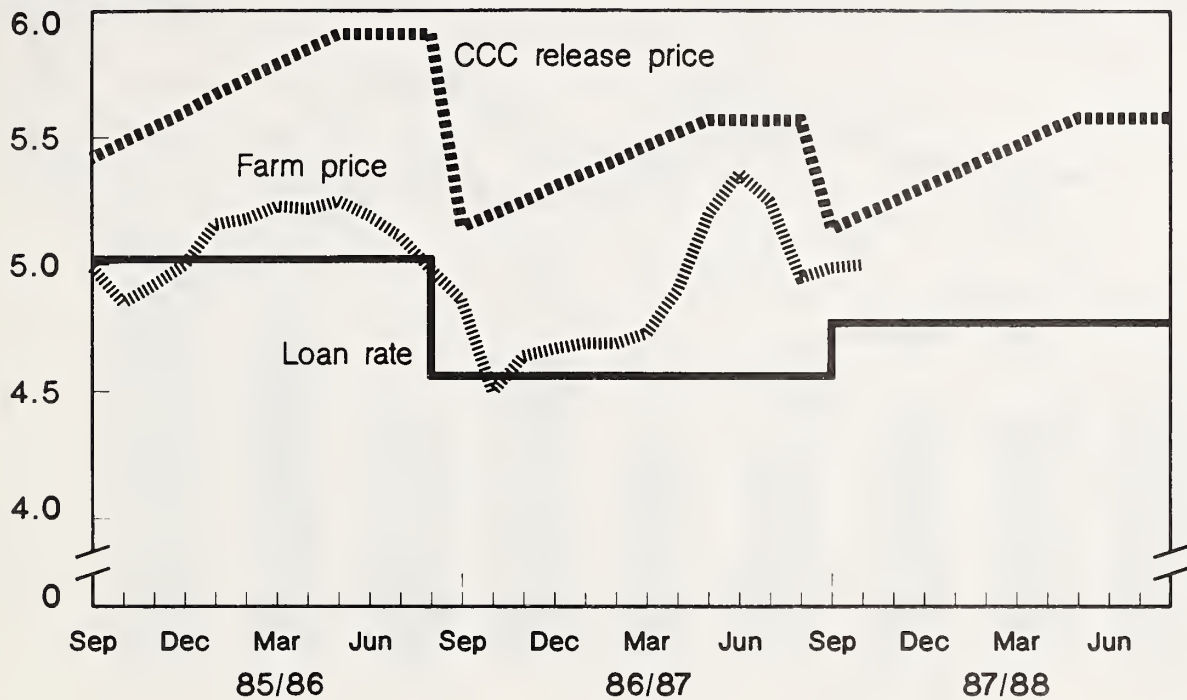
Million metric tons





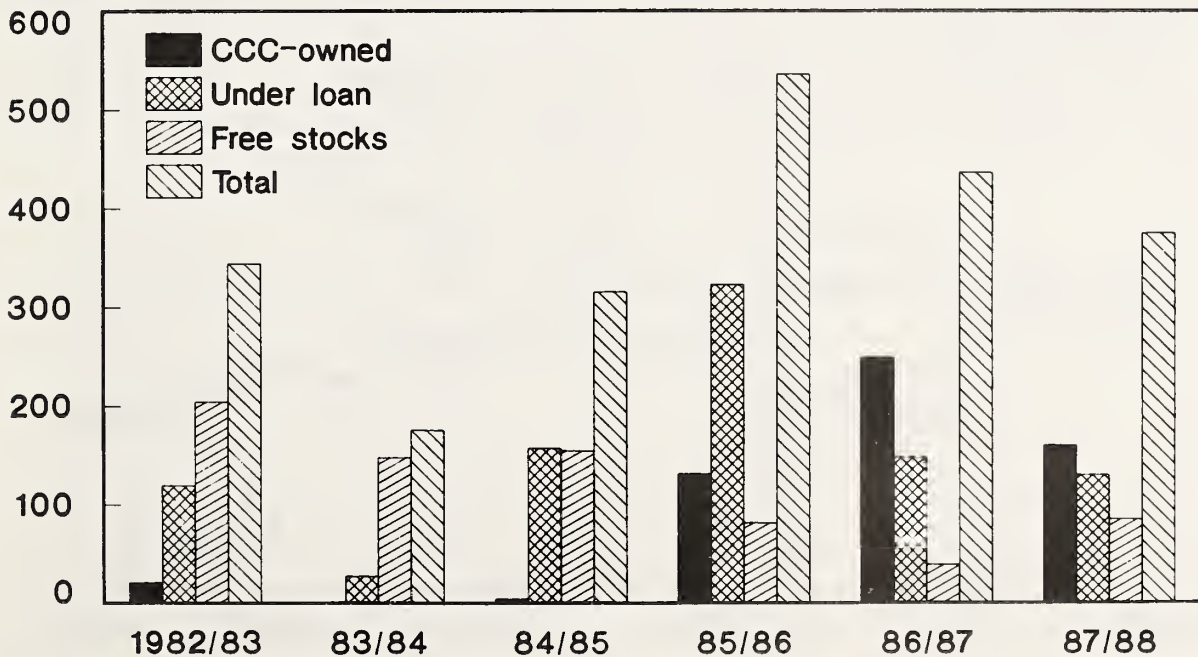
## U.S. Soybean Prices and Loan Rate

\$ per bushel



## U.S. Soybean Ending Stocks

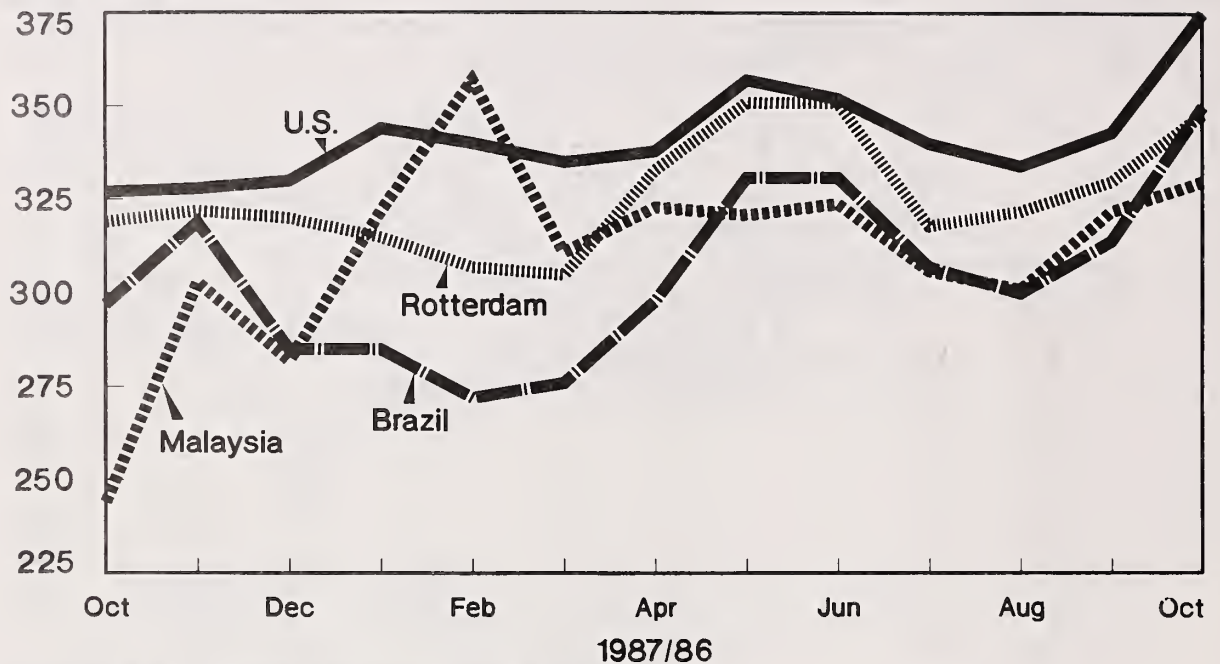
Million bushels



As of September 1.

## Vegetable Oil Prices

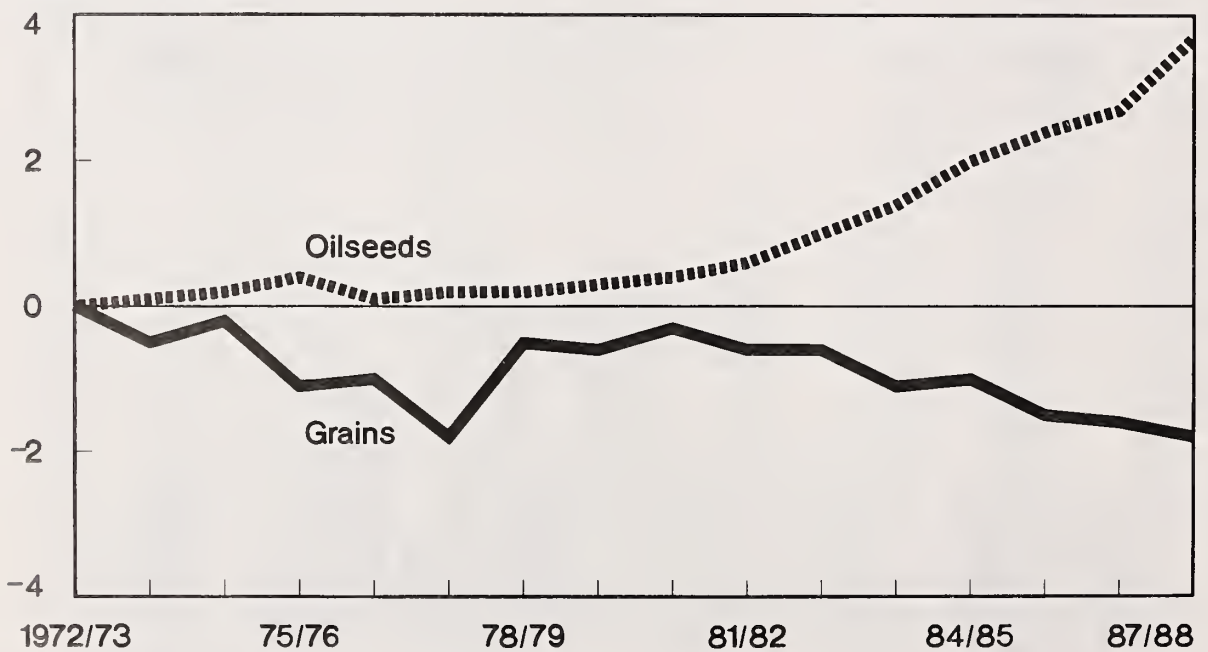
\$ per metric ton



Soybean oil in U.S., Brazil, Rotterdam. Palm oil in Malaysia.

## Changes in World Cropland Area

Million hectares

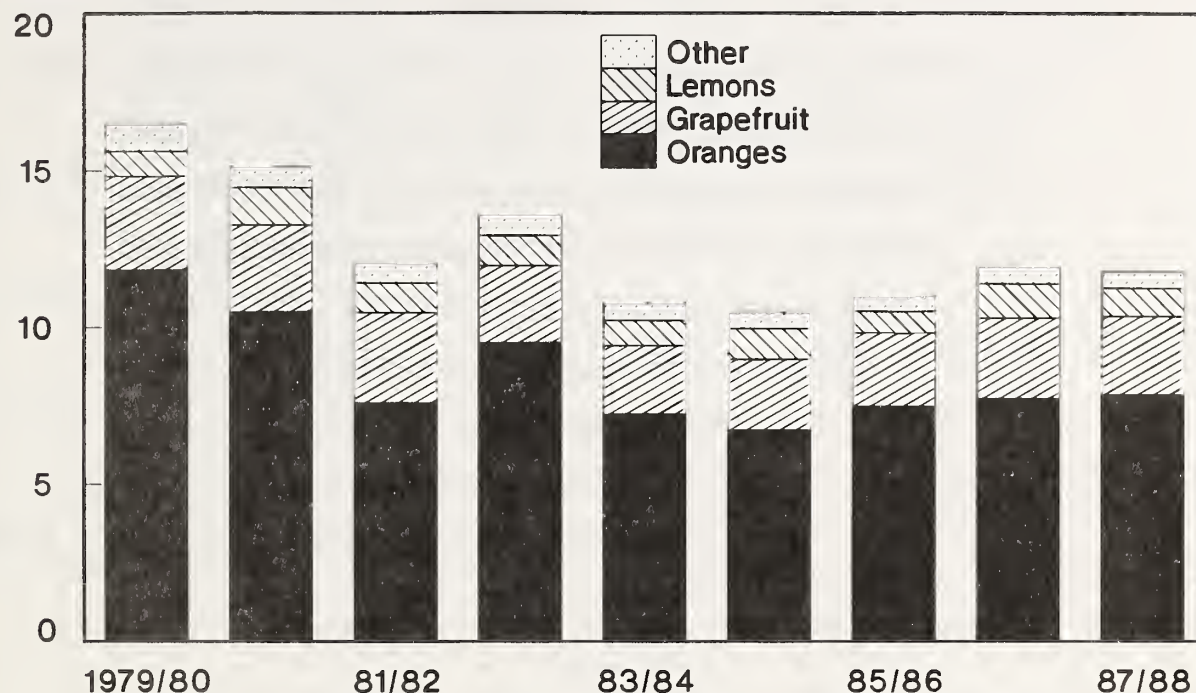


Total changes since 1972.



## U.S. Citrus Fruit Production

Million tons



## U.S. Production of Selected Noncitrus Fruit

				Change from	
	1981-85 average	1986	1987	81-85 average	1986
	1,000 tons			Percent	
Apples	4,050	3,946	4,807	19	22
Apricots	112	55	116	4	11
Cherries	138	250	372	170	49
Grapes	5,464	5,226	5,096	-7	-2
Nectarines	188	172	190	1	10
Peaches	1,172	1,163	1,243	6	7
Pears	786	766	862	10	12
Prunes/Plums	225	490	909	284	86
Strawberries	453	510	540	19	6
Total	12,588	12,578	14,135	12	12

## Consumer Price Index for Fresh Fruit

Quarter	1984	1985	1986	1987	1988 <sup>1</sup>
1967=100					
1st	295	356	352	400	405
2nd	321	377	375	429	435
3rd	355	372	386	412	420
4th	343	344	364	379 <sup>1</sup>	395
Annual	329	362	369	405 <sup>1</sup>	414

1/ Estimated.

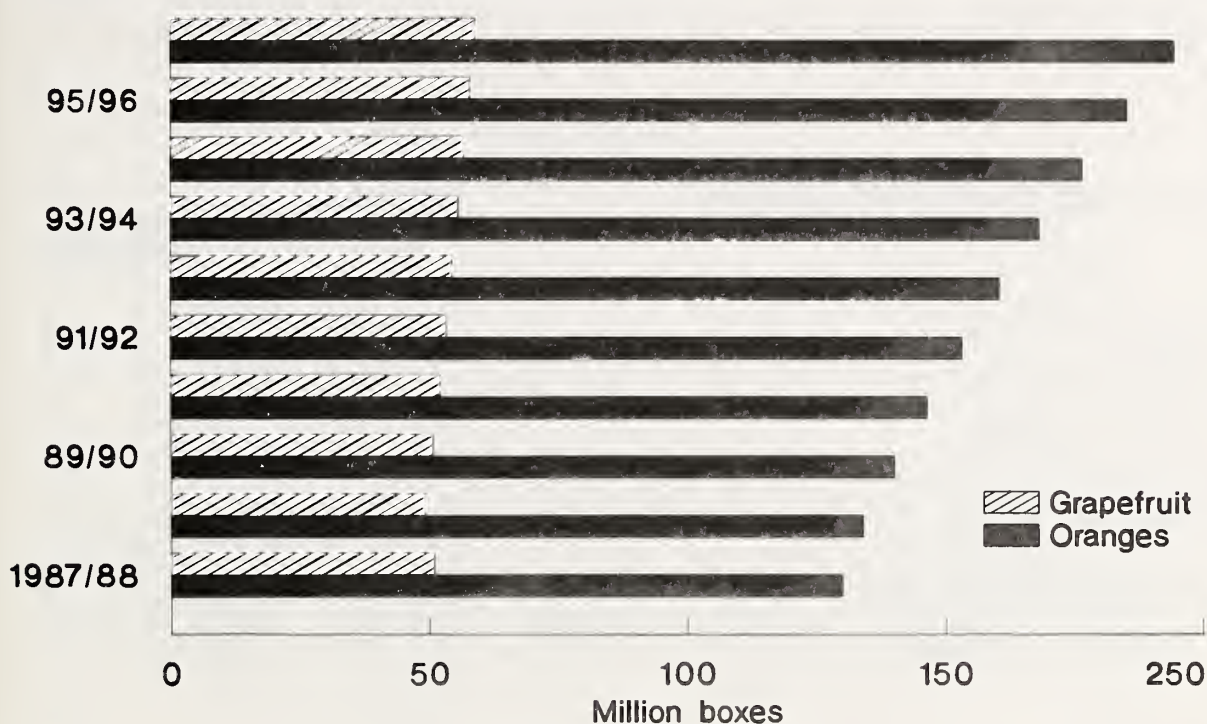
## Grower Prices for Fresh and Processing Fruit

Quarter	1984	1985	1986	1987	1988 <sup>1</sup>
1977=100					
1st	142	180	150	168	162
2nd	170	178	159	178	172
3rd	255	184	178	175	174
4th	239	180	180	173 <sup>1</sup>	166
Annual	202	181	167	174	168

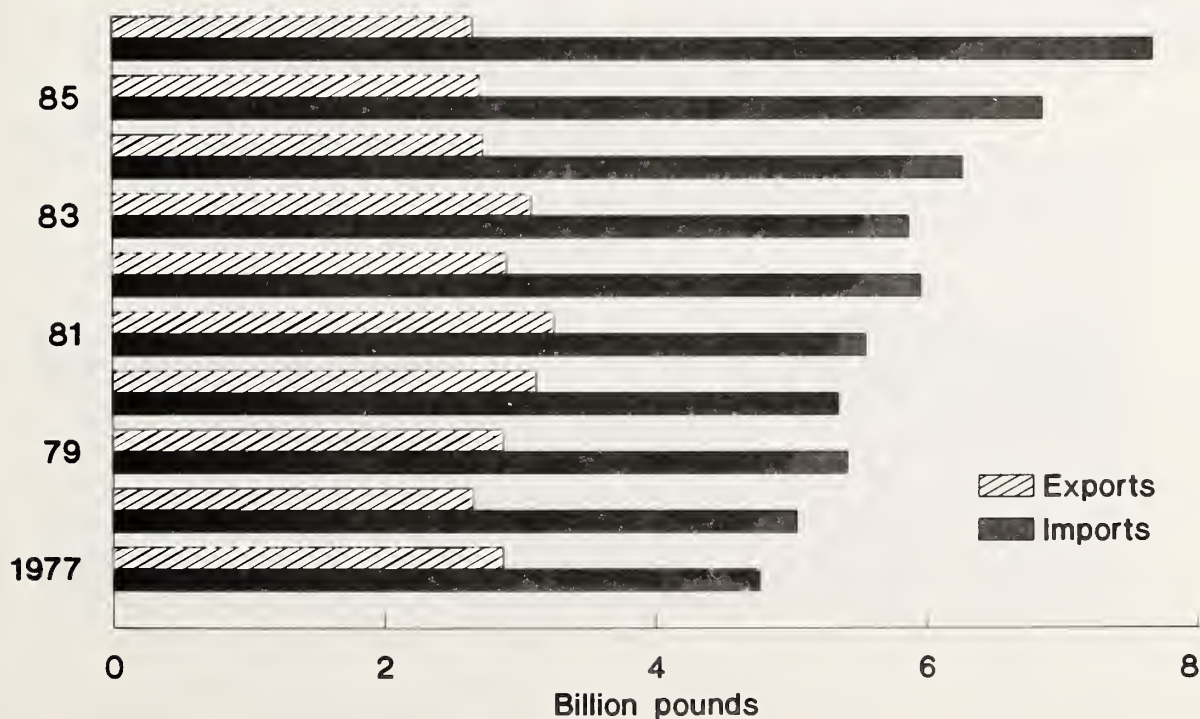
1/ Estimated.



## Projected Florida Citrus Production

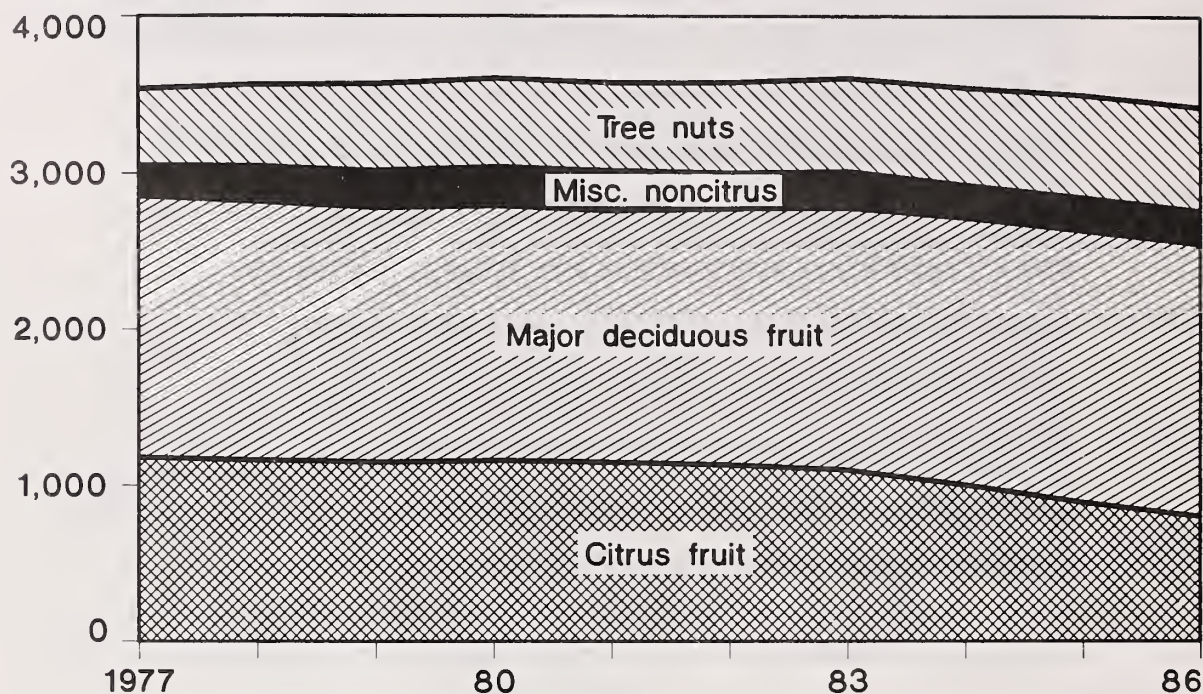


## U.S. Trade in Fresh Fruit



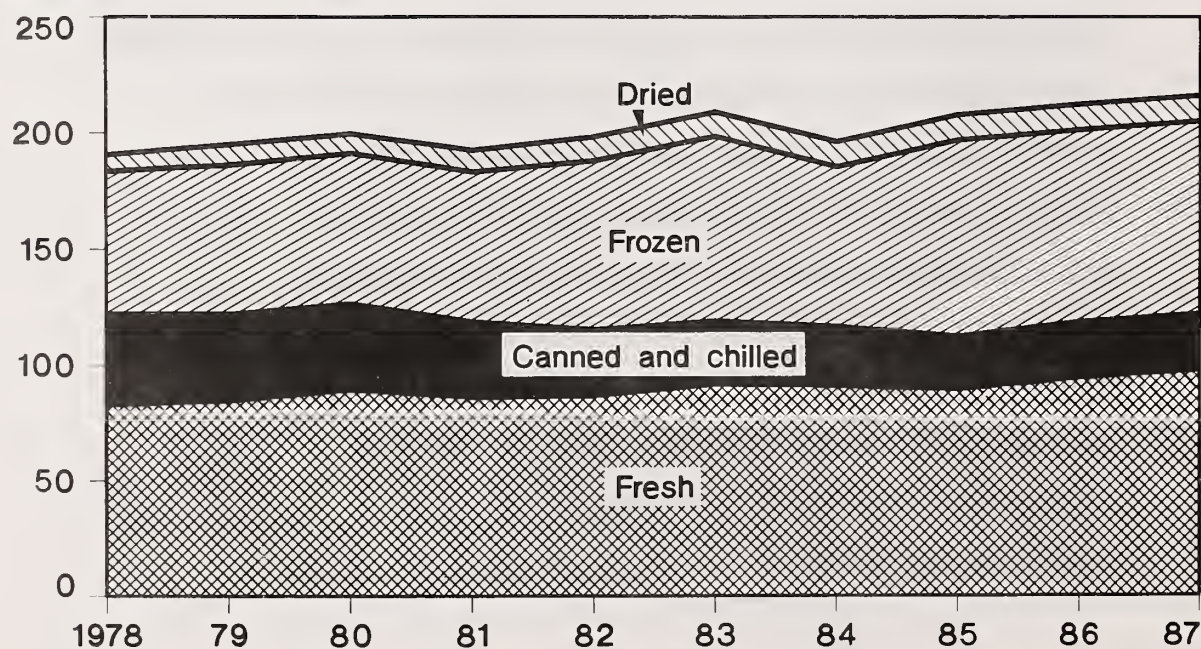
## Bearing Acreage of U.S. Fruit and Tree Nuts

Thousand acres



## Per Capita Fruit Consumption

Pounds

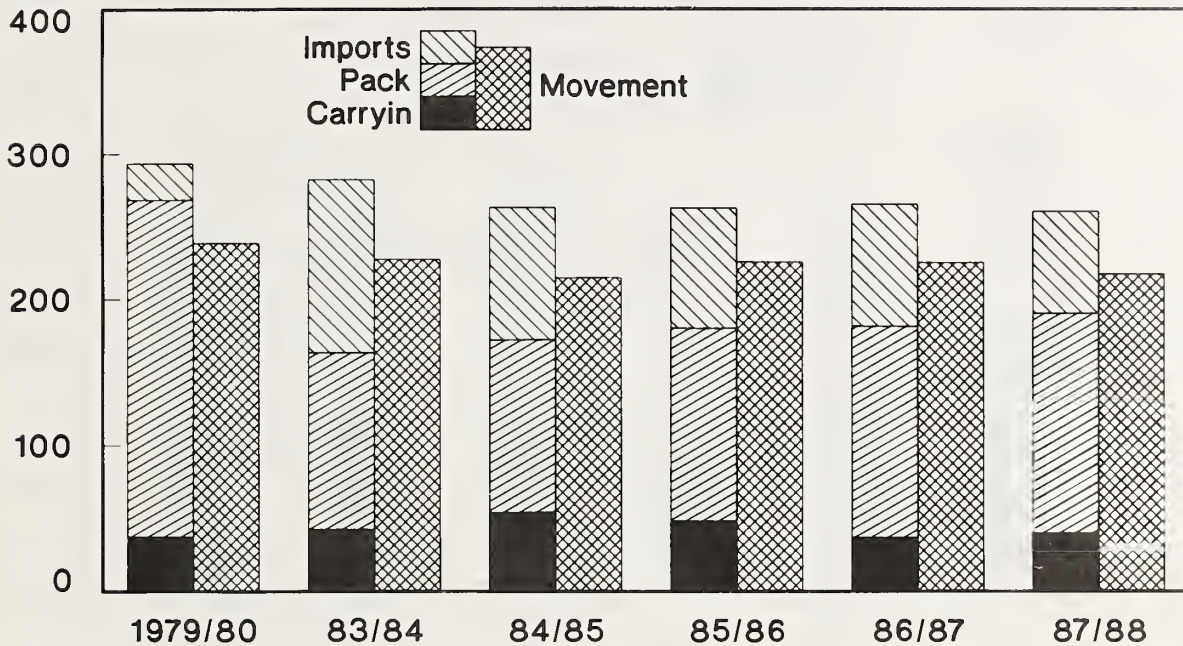


Fresh-weight equivalent. 1987 estimated. Canned and frozen include fruit and juice.



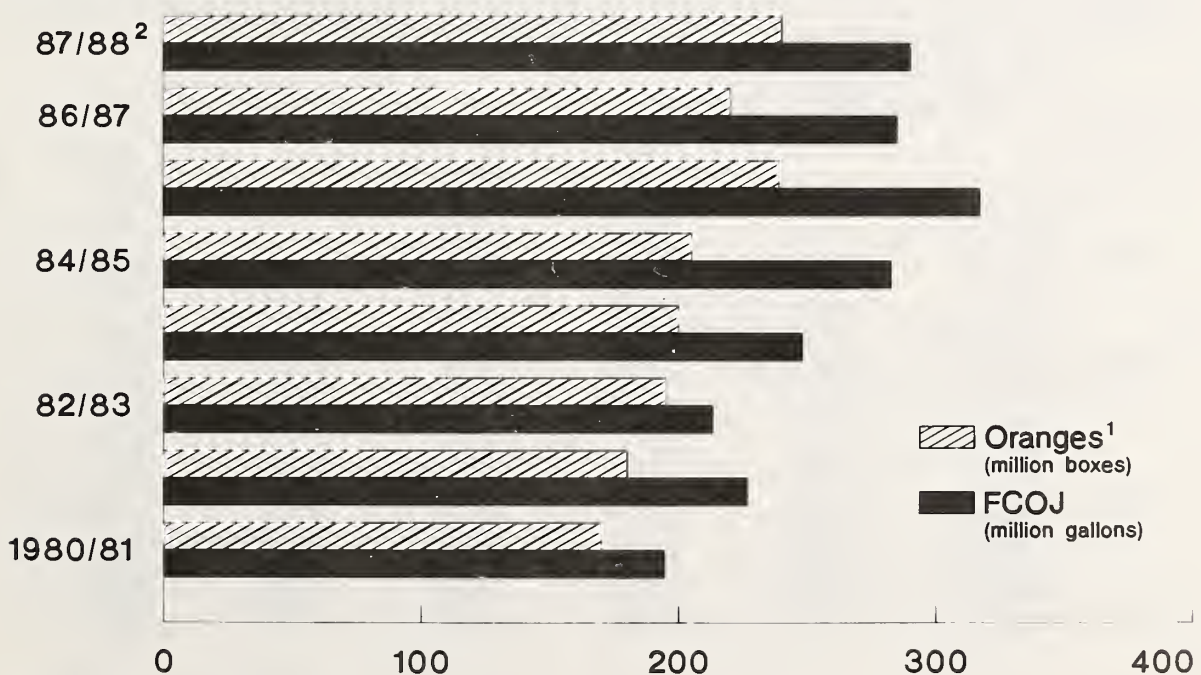
## Florida Supply and Movement of FCOJ

Million gallons



1986/87 imports and movement estimated. 1987/88 estimated.

## Brazilian Orange Production and FCOJ Supply



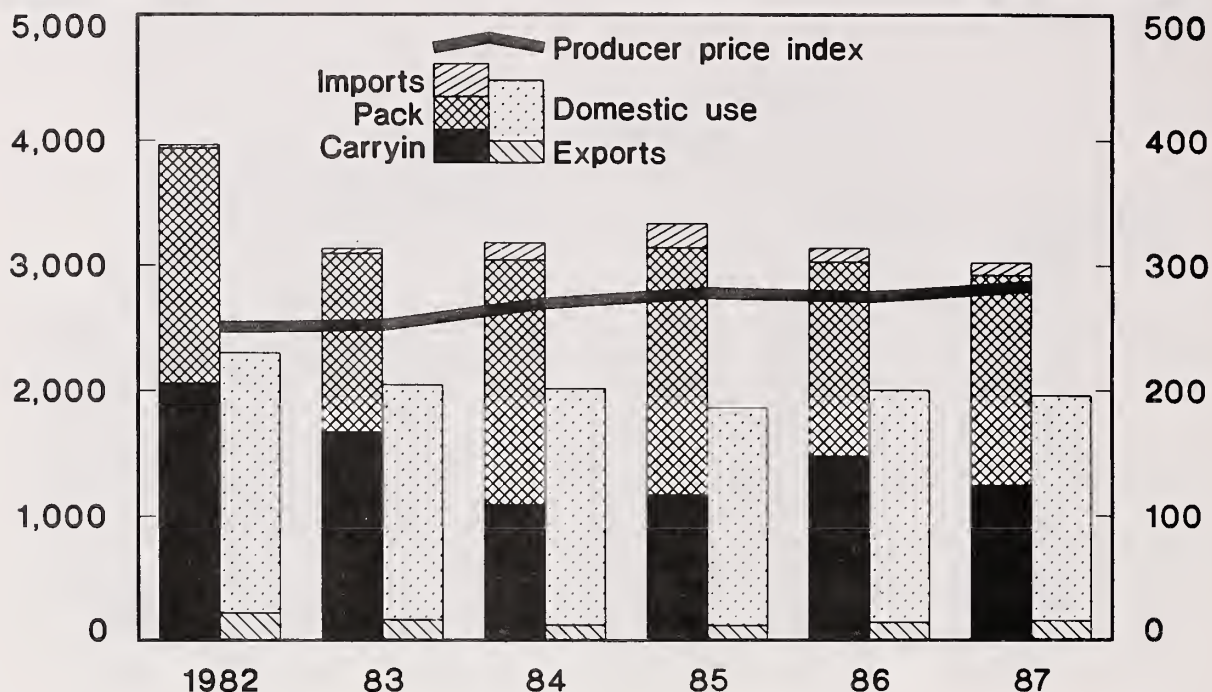
1/ Sao Paulo.

2/ Projected.

## U.S. Supply, Movement, and Producer Price of Canned Fruit

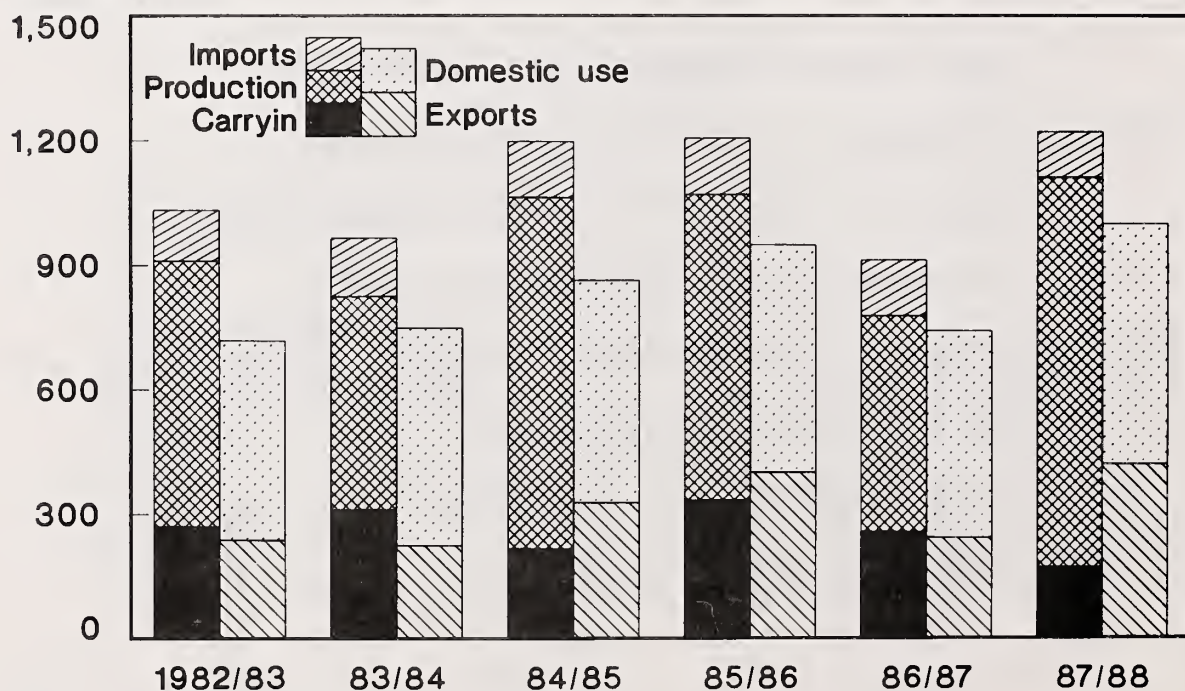
Million pounds

Price-% of 1967



## U.S. Supply and Movement of Tree Nuts

Million pounds





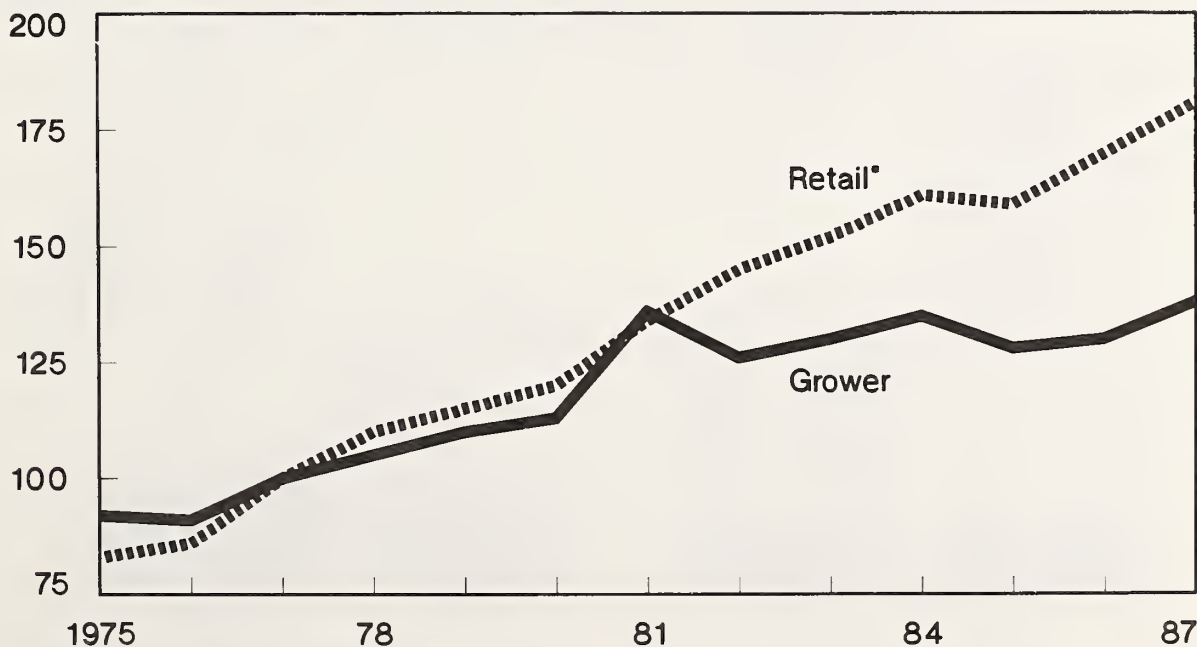


## U.S. Vegetable Industry at a Glance

	1986	1987 forecast	Percent change
Million pounds			
Production			
Fresh	21,527	21,494	---
Processing	21,954	22,918	4
Imports			
Fresh	3,124	3,280	5
Processed	907	653	-28
Exports			
Fresh	1,251	1,201	-4
Processed	585	667	14
1977=100			
Grower prices			
Fresh	123	134	9
Commercial	130	137	5

## Vegetable Price Indexes

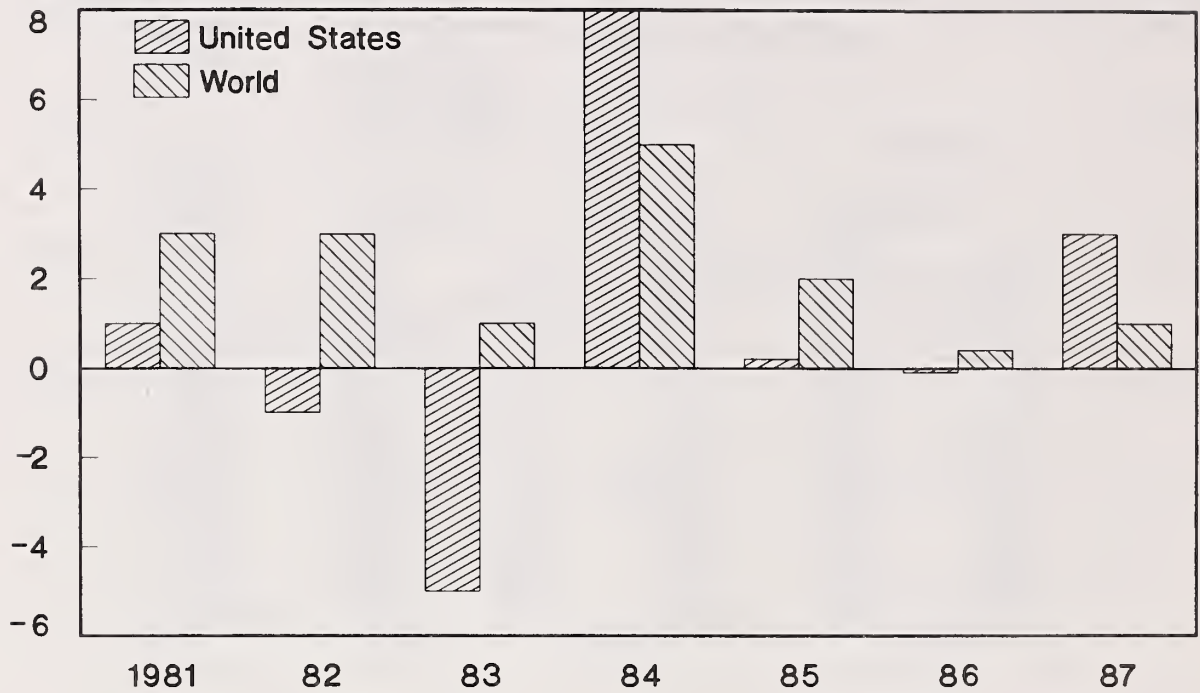
% of 1977



\* Excludes potatoes

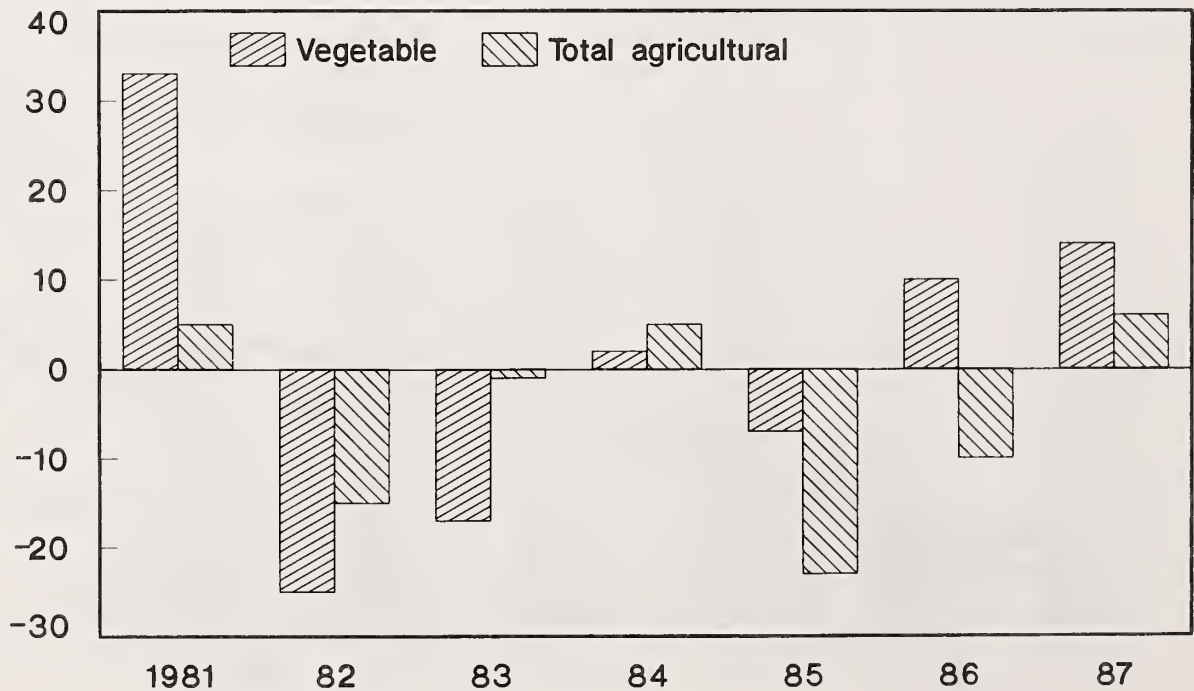
## U.S. and World Vegetable Production

% change from previous year



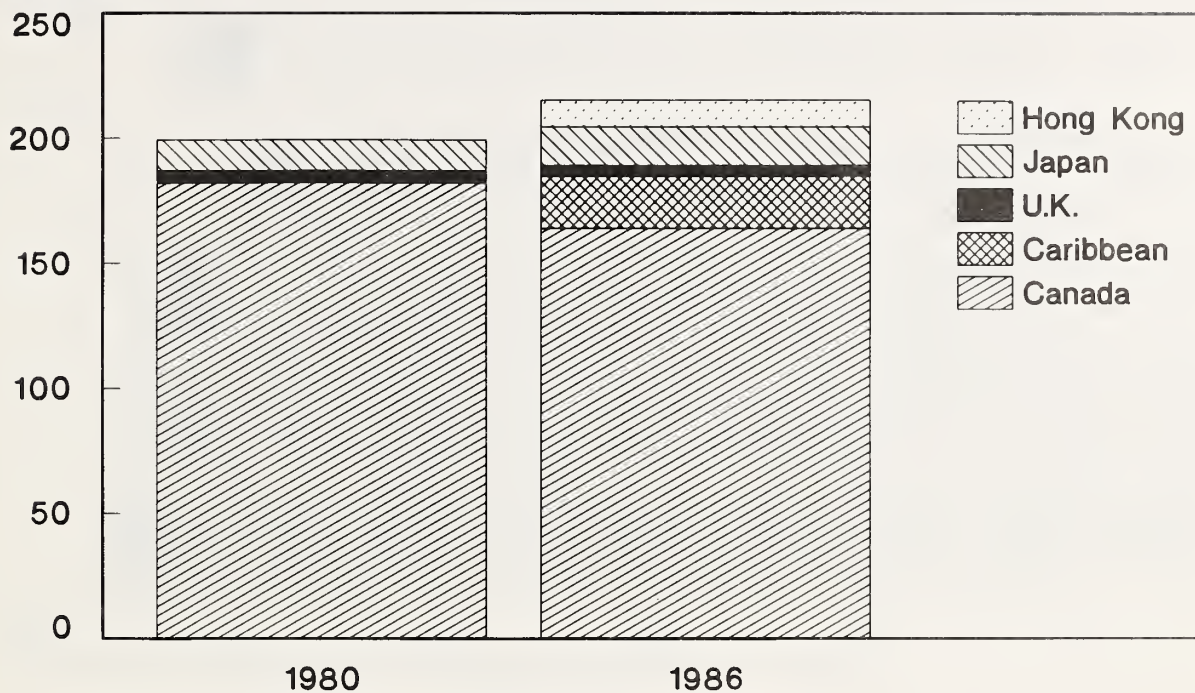
## U.S. Vegetable and Total Agricultural Exports

% change from previous year



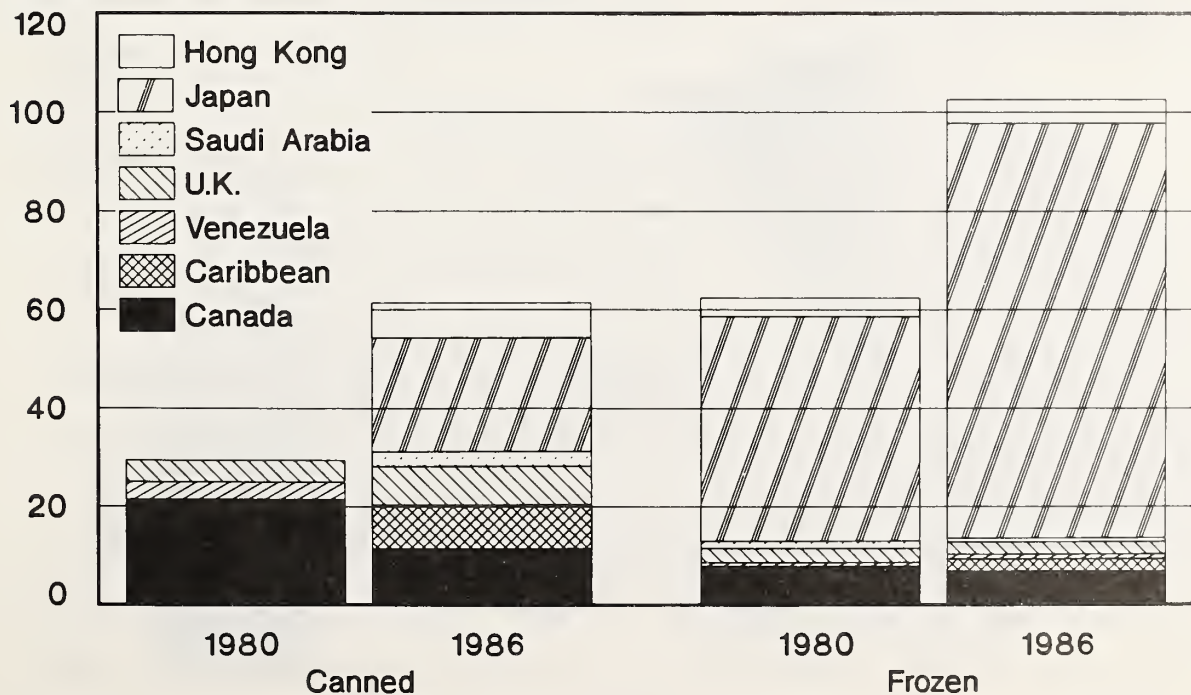
## Destination of U.S. Fresh Vegetable Exports

\$ million



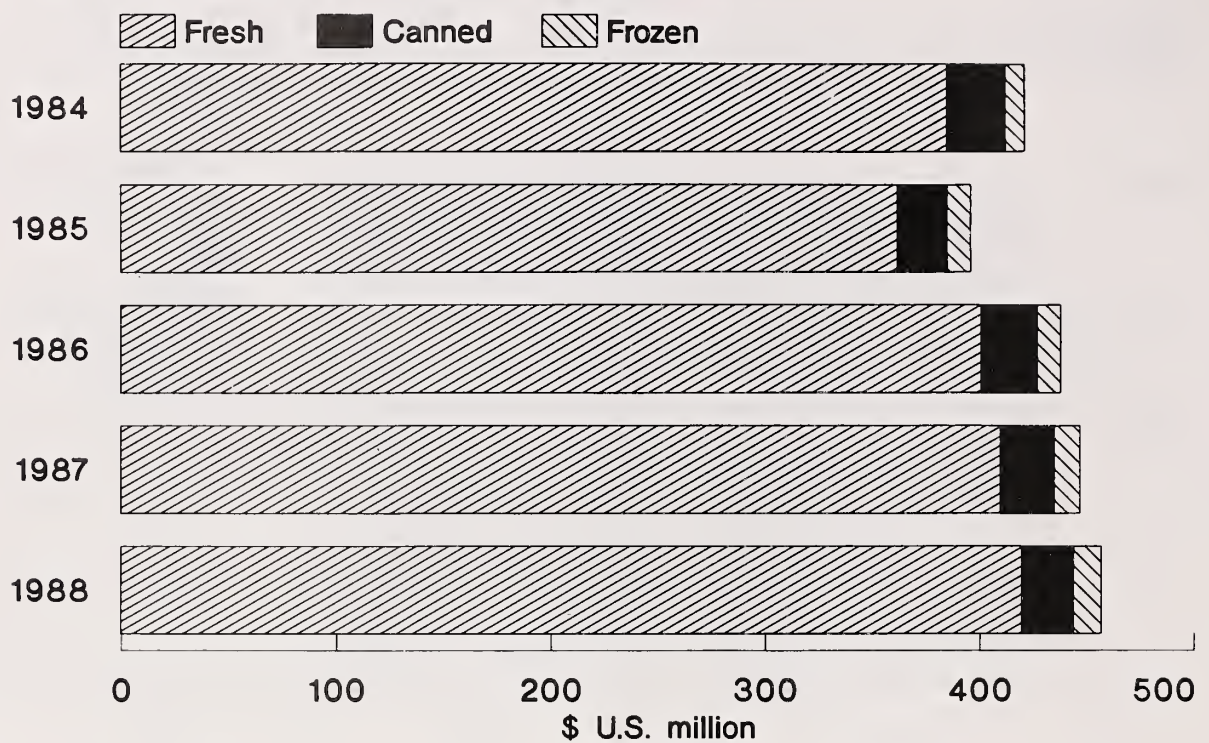
## Destination of U.S. Processed Vegetable Exports

Percent

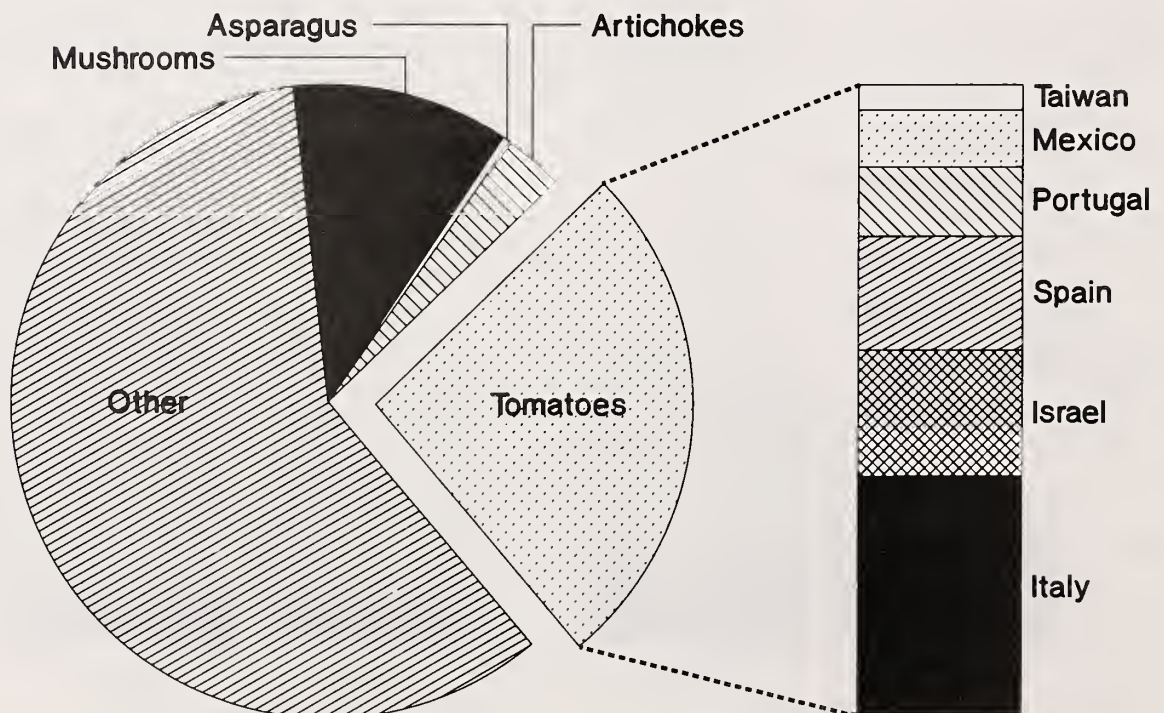




## Canadian Imports of U.S. Vegetables



## Share of Processed Vegetable Imports, 1986

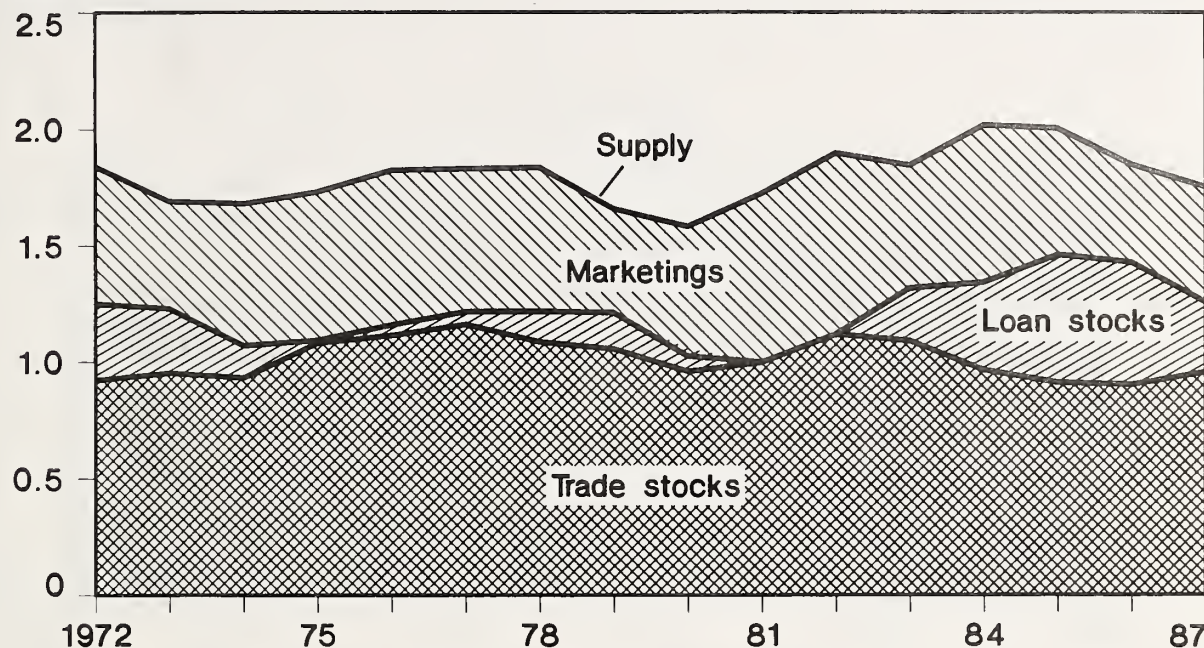






## Burley Tobacco Supply

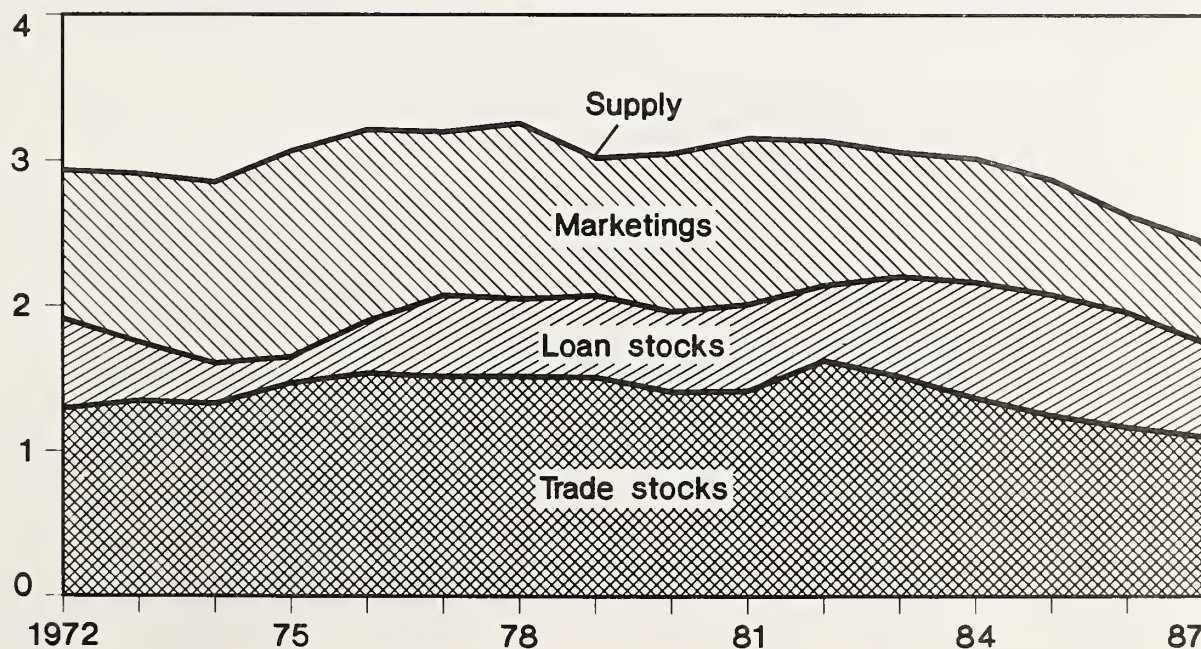
Billion pounds



Trade stocks include manufacturers' and dealers'. 1987 marketings preliminary.

## Flue-Cured Tobacco Supply

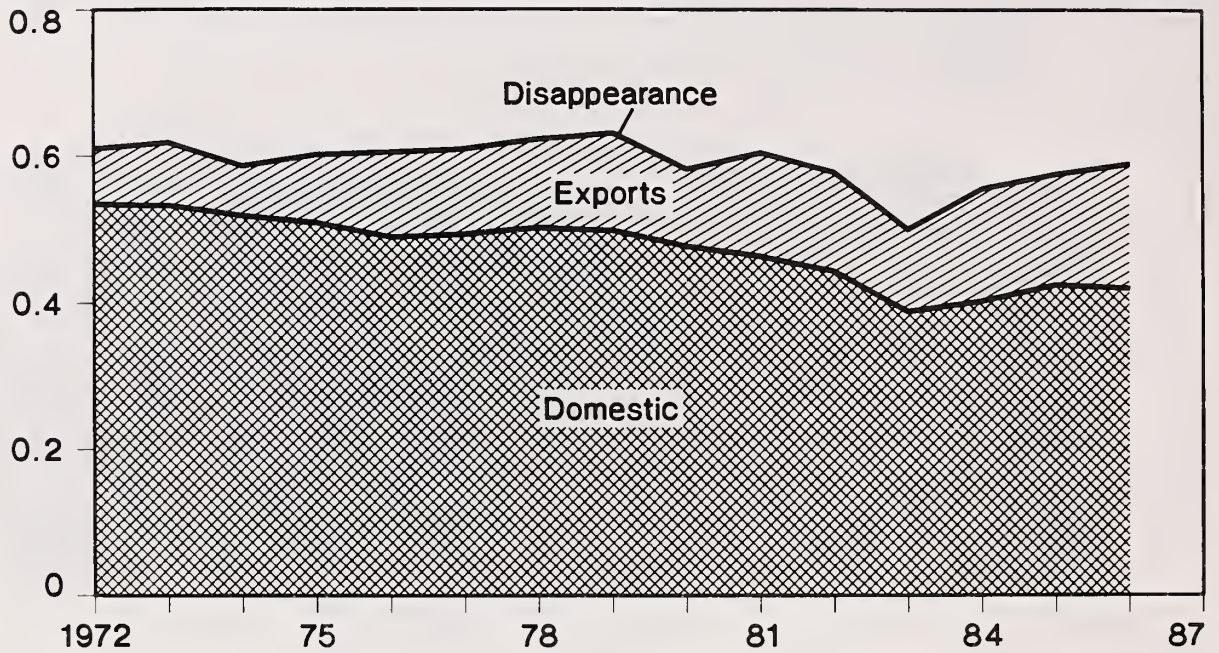
Billion pounds



Trade stocks include manufacturers' and dealers'. 1987 marketings preliminary.

## Burley Use

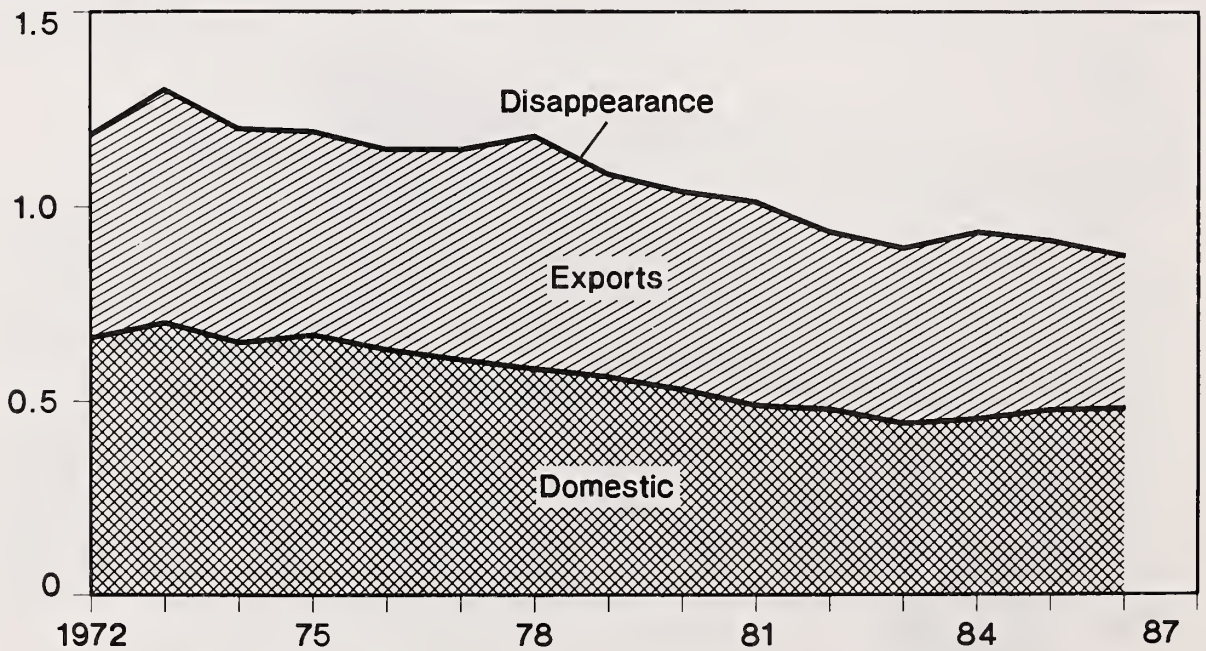
Billion pounds



Crop year beginning October 1.

## Flue-Cured Use

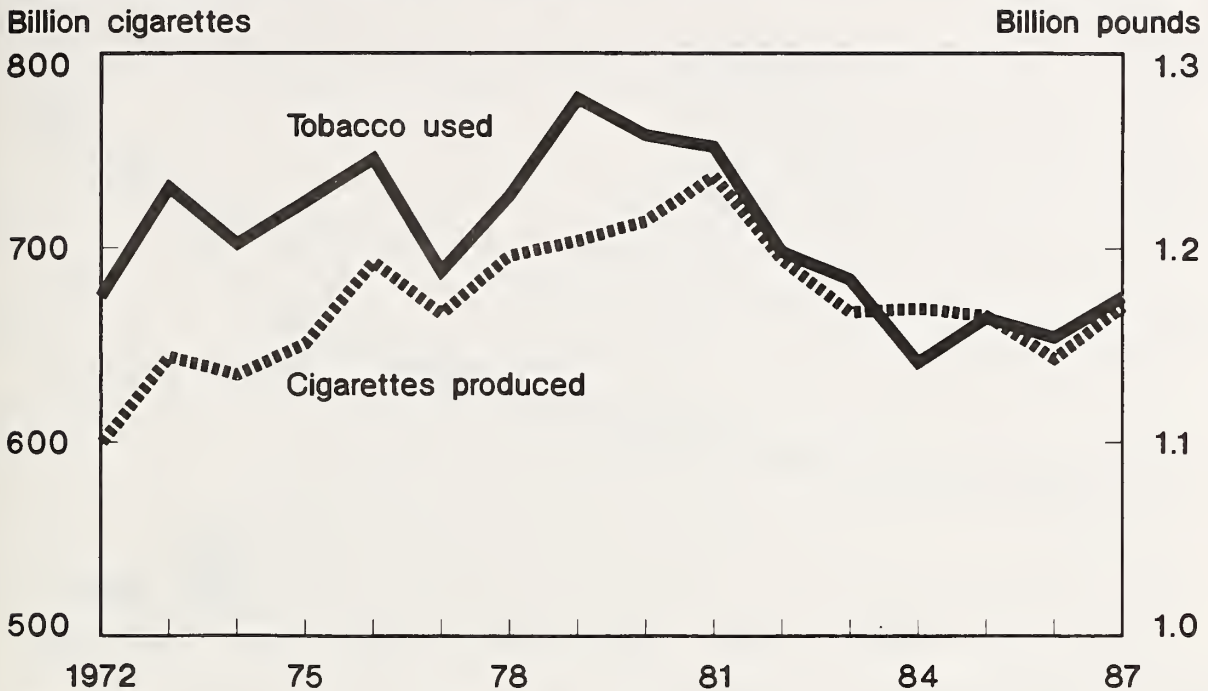
Billion pounds



Crop year beginning July 1.

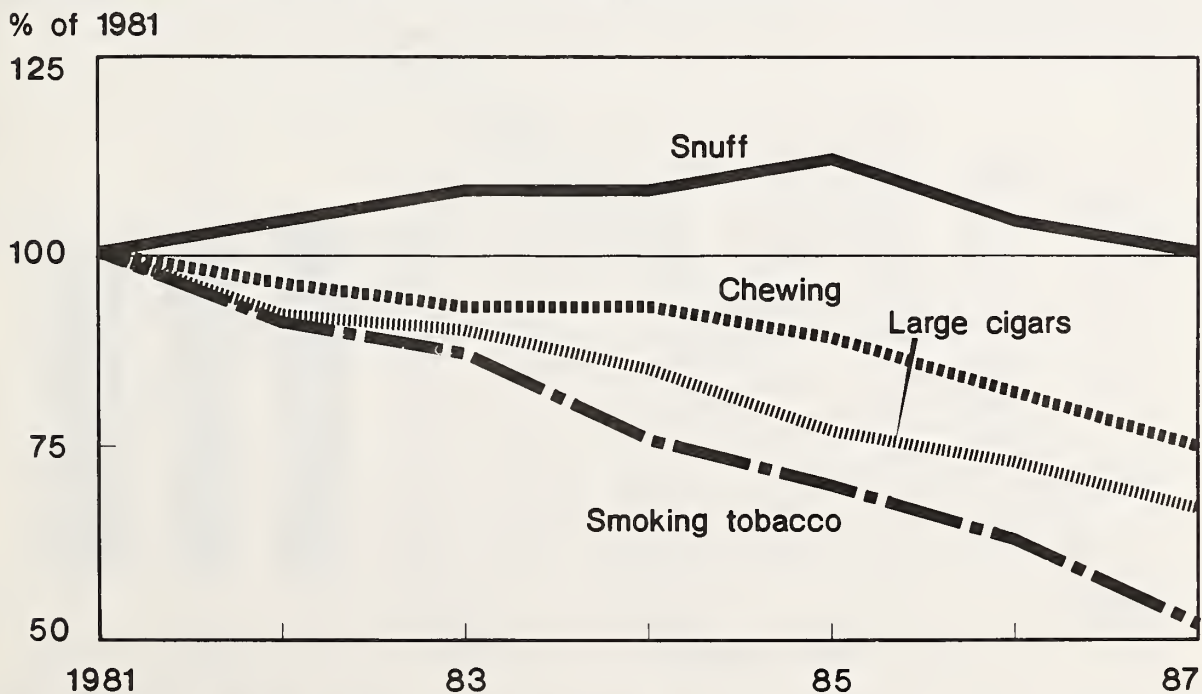


## Cigarettes Produced and Tobacco Used



Billion pounds in unstemmed processing weight. 1987 forecast.

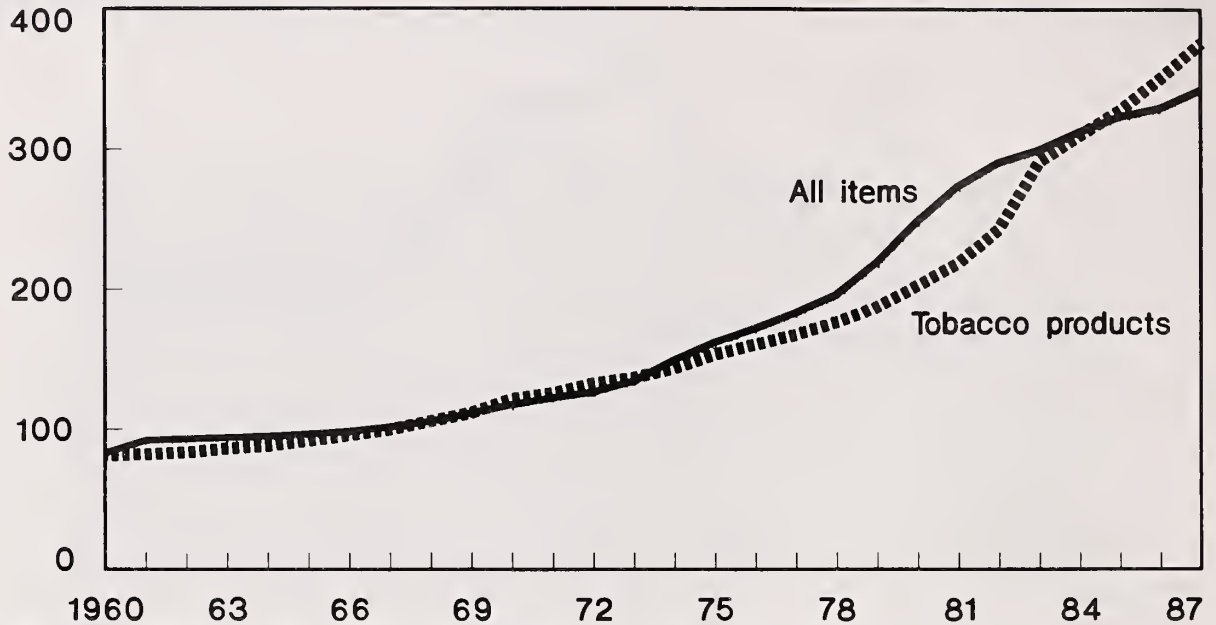
## Per Capita Consumption of Tobacco Products



1987 preliminary. Per male 18 and over, except snuff per person 18 and over.

## Consumer Price Index and Tobacco Prices

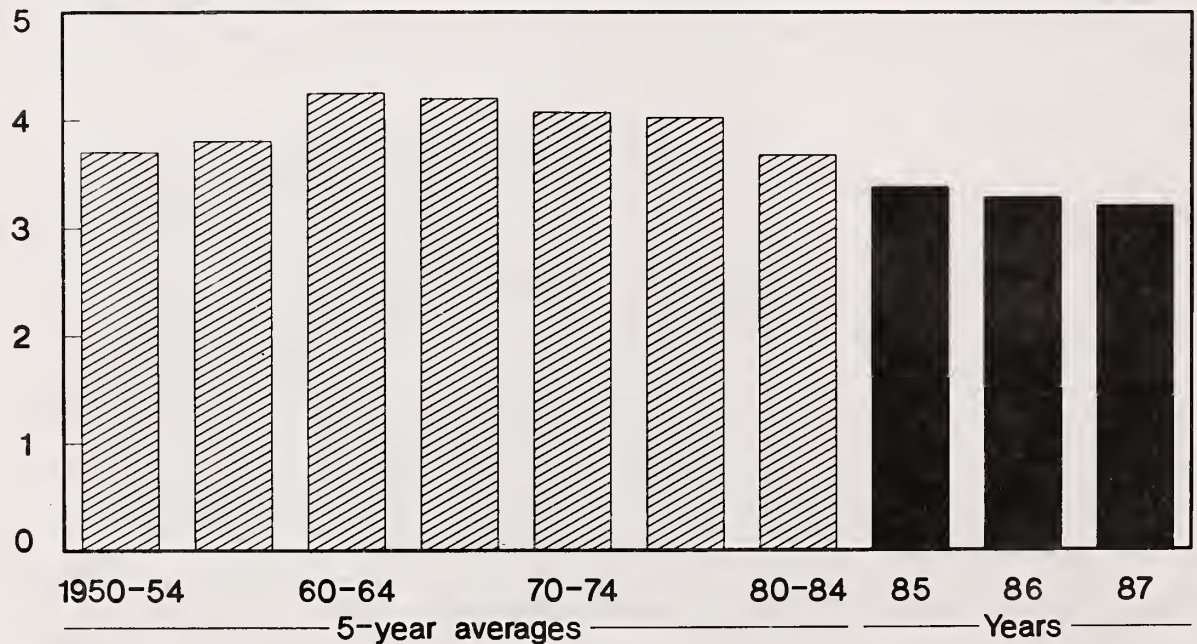
% of 1967



BLS Data. Beginning 1978 for all urban consumers.  
Weighted average of all tobacco product prices. Latest year estimated.

## Per Capita Cigarette Consumption

Thousand cigarettes

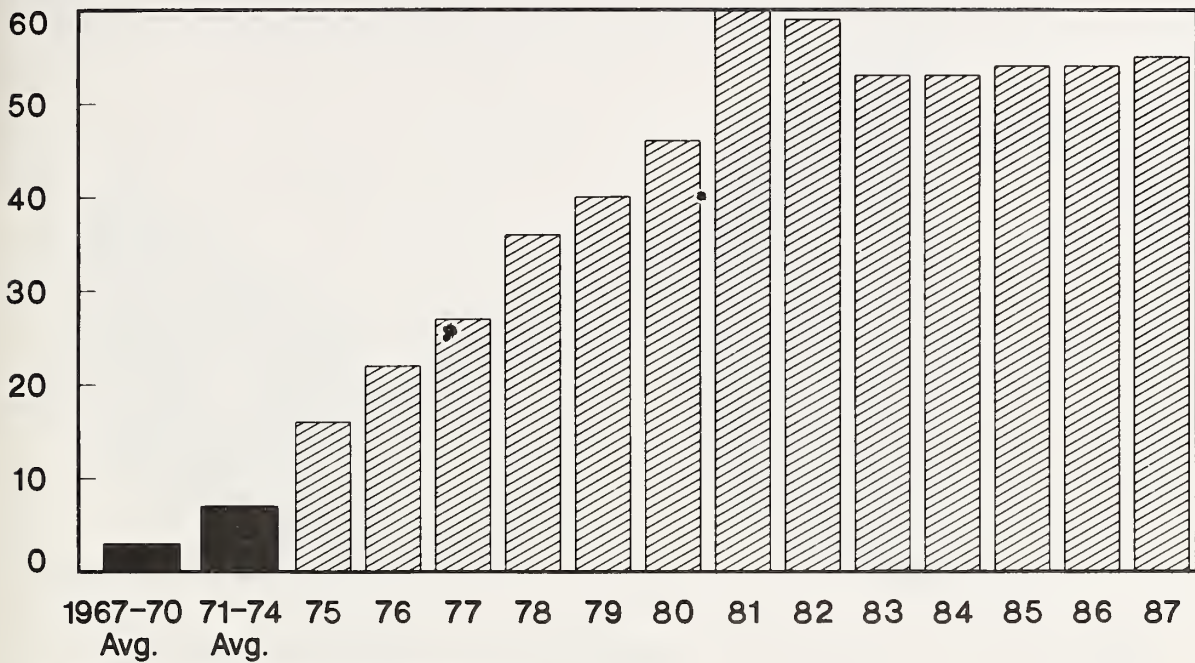


1987 projected. Persons 18 and over.



## Cigarettes: Low-Tar Market Share\*

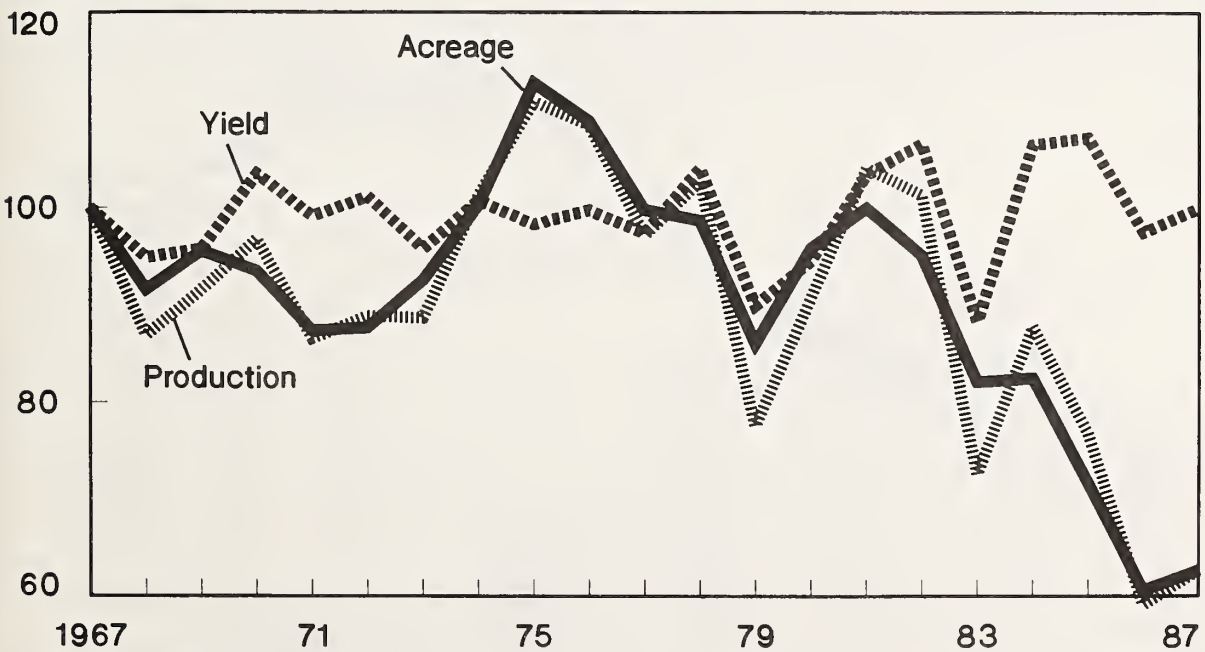
Percent



\* 15 mg. 'tar' or less. Latest year estimated.

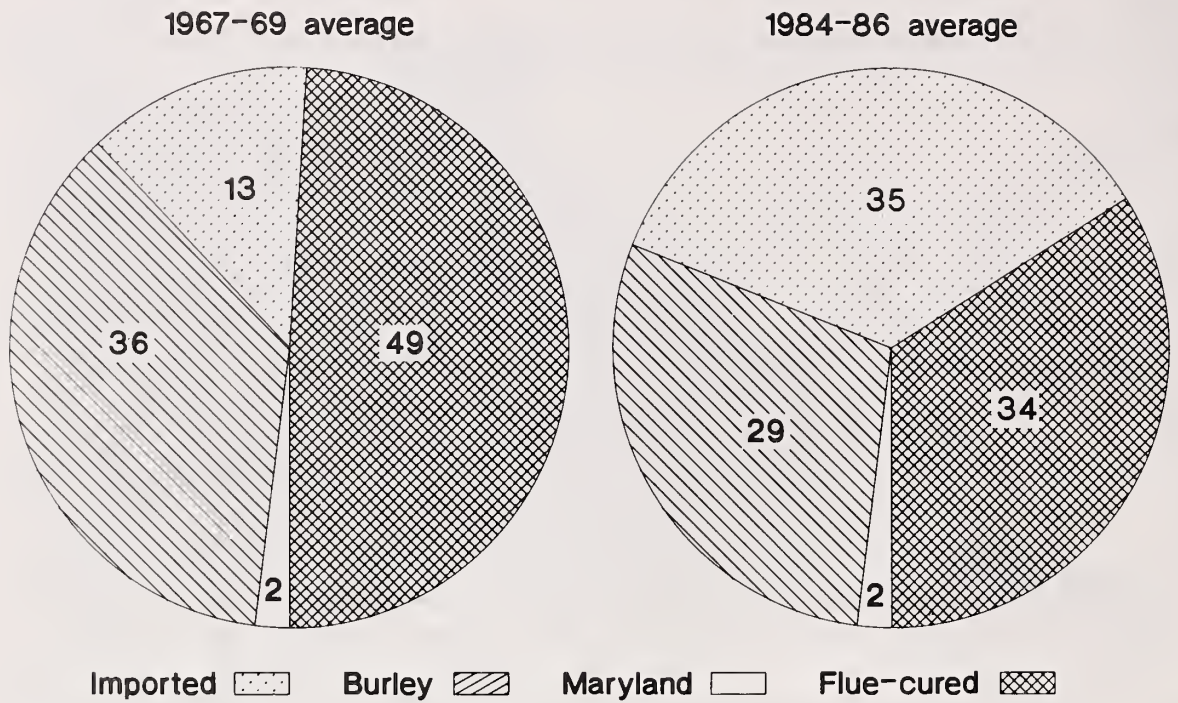
## Tobacco Acreage, Yield, and Production

% of 1967



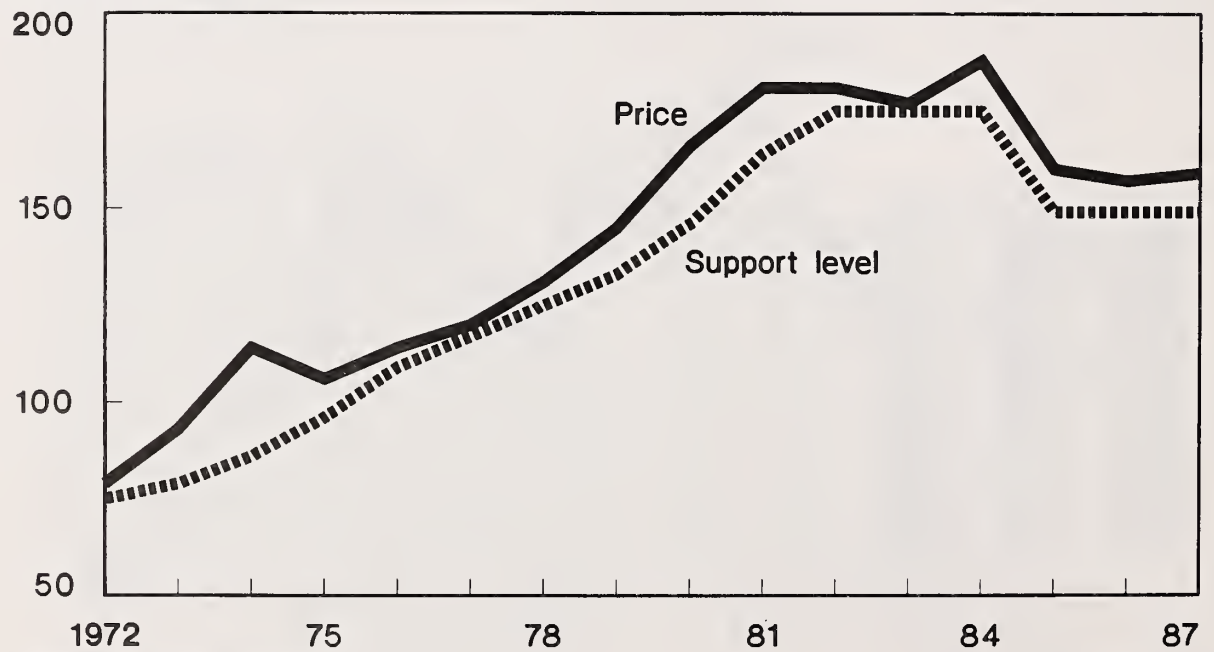
Latest year subject to revision.

## Tobacco Use in Cigarettes



## Burley Price and Support Levels

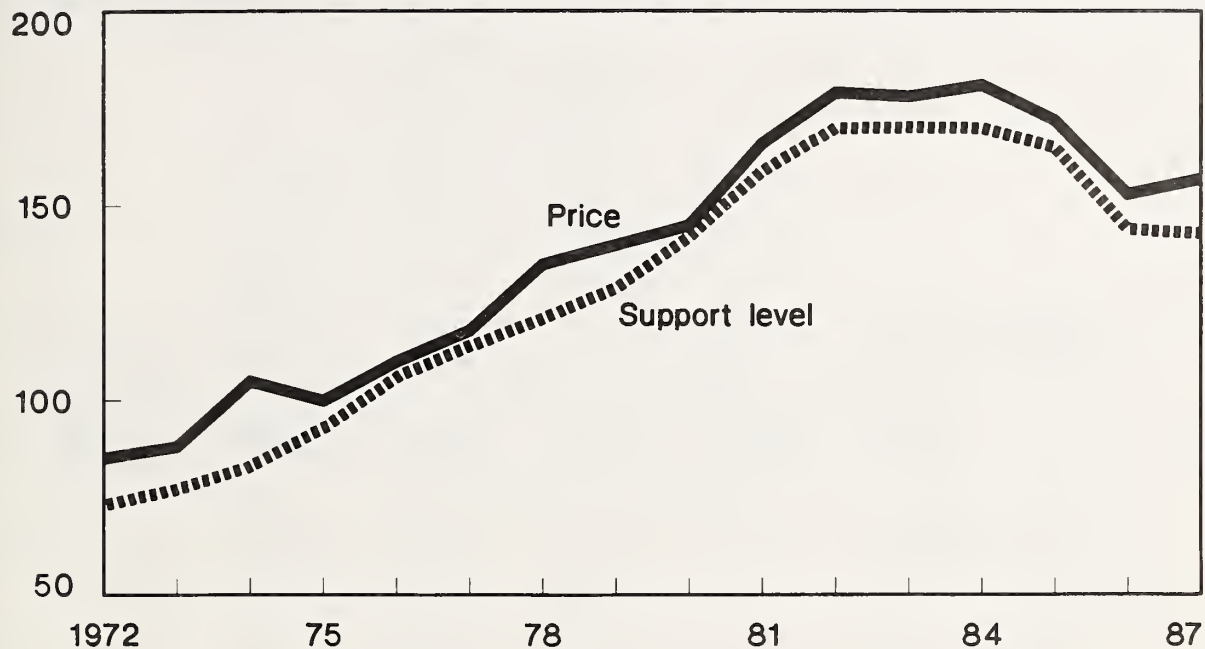
Cents per pound



Latest year's price estimated.

## Flue-Cured Price and Support Levels

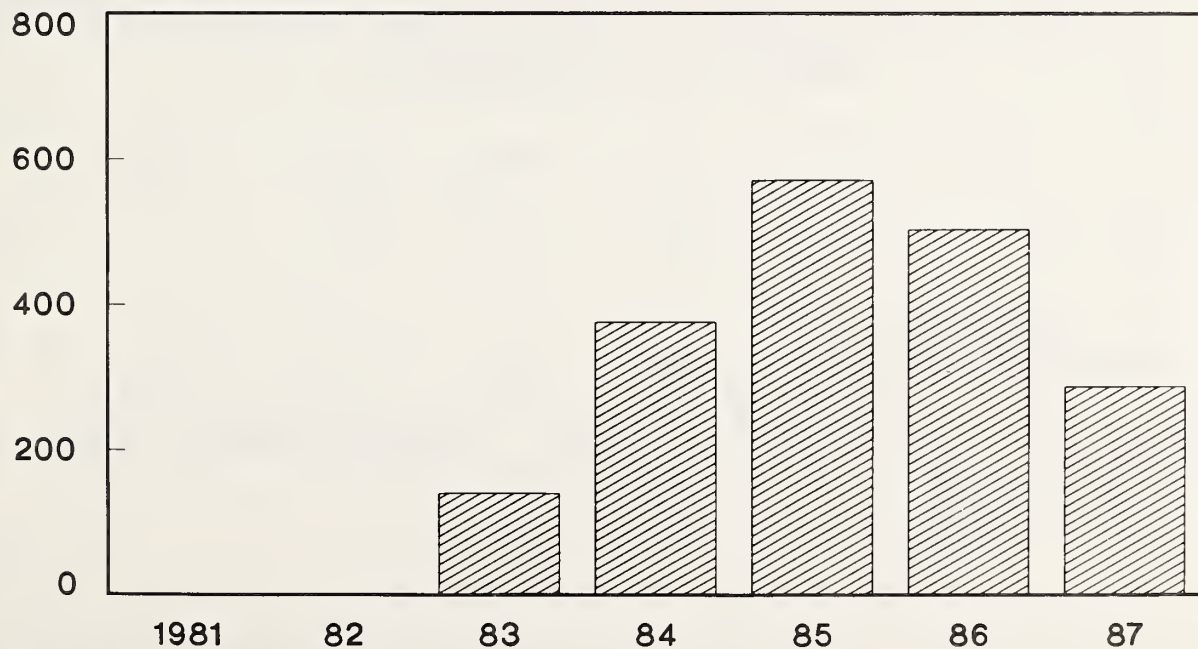
Cents per pound



Latest year's price estimated.

## Unsold Burley Loan Stocks

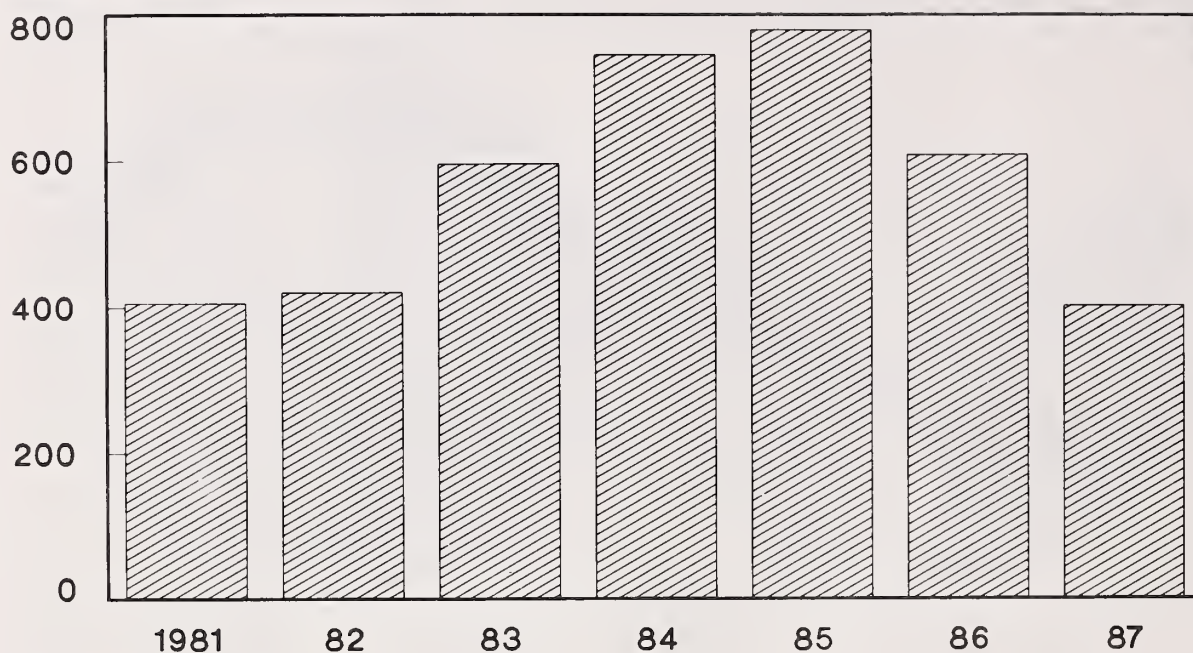
Million pounds



Stocks at end of August.

## Unsold Flue-Cured Loan Stocks

Million pounds



Stocks at end of August.



## Food Price Prospects

*Ralph L. Parlett, Jr.*

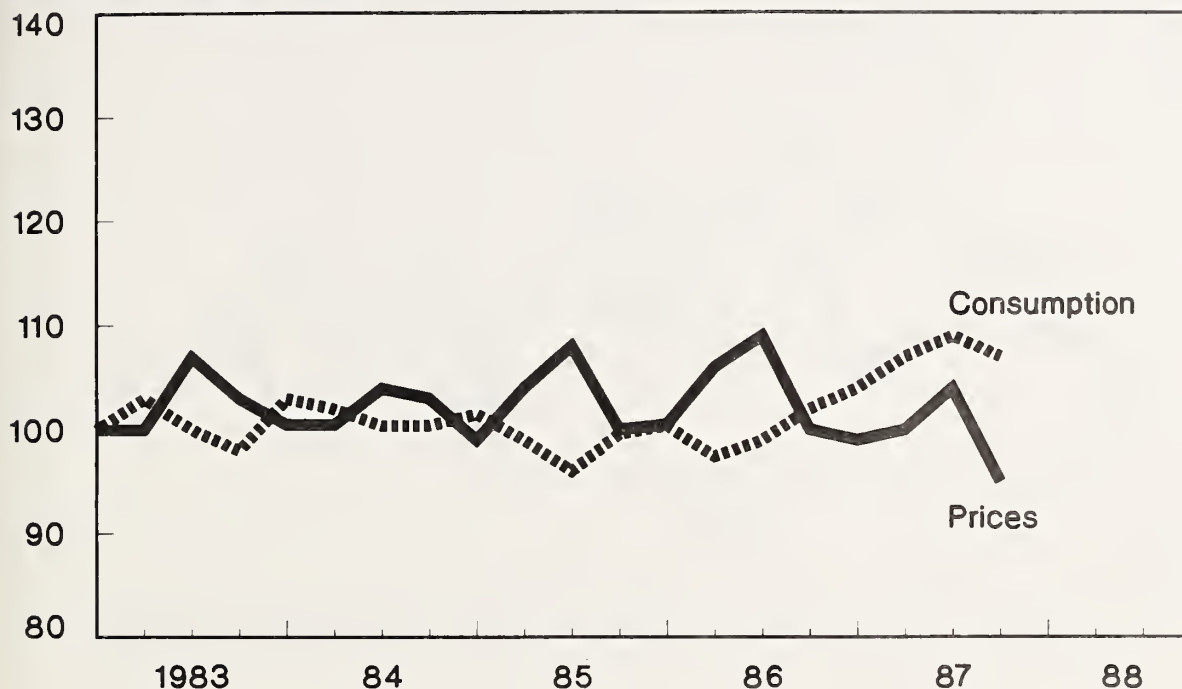
### Market Basket Statistics

	1985	1986	1987	1988
	Percent change			
Farm value	-6.8	-1.9	3.0	-2 to 0
Farm to retail price spread	5.2	3.1	5.2	3 to 5
Retail cost	1.1	1.5	4.5	2 to 4



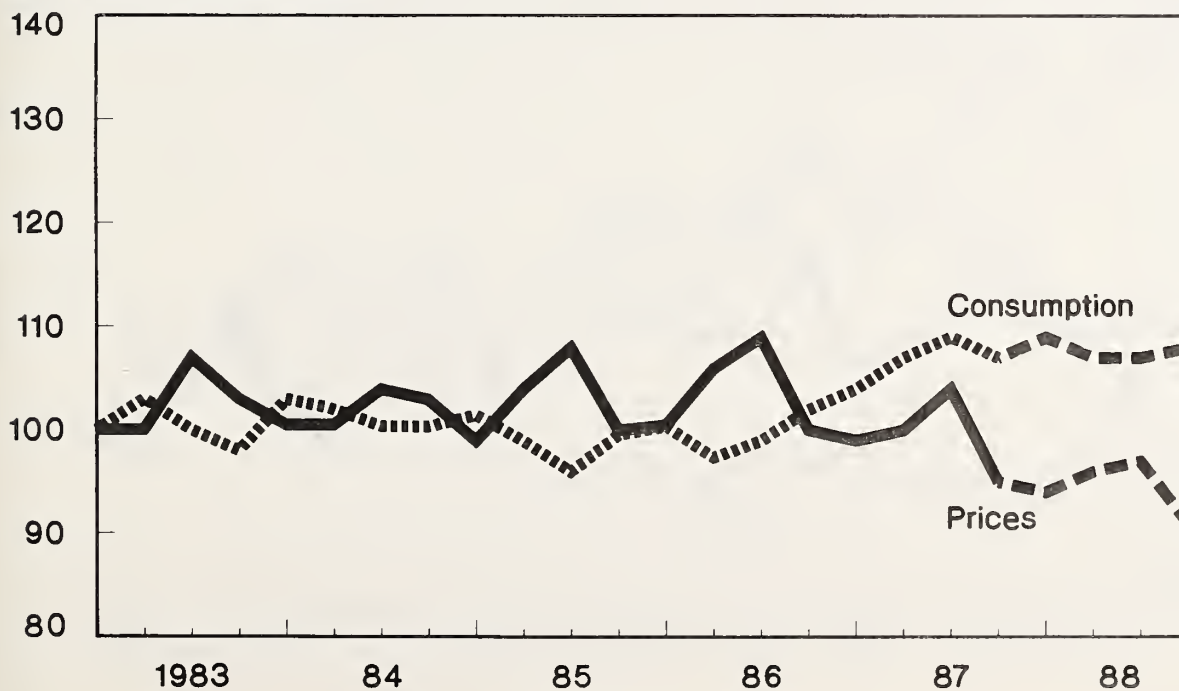
## Beef Consumption and Prices through 1987

% of first quarter 1983



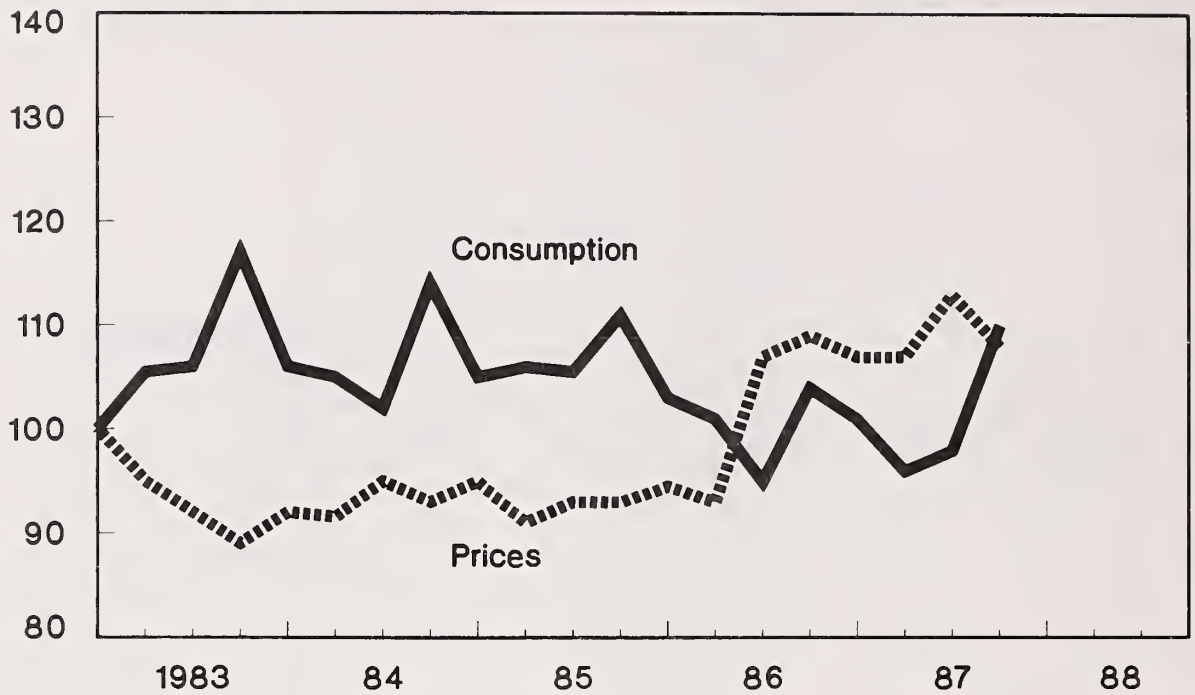
## Beef Consumption and Prices through 1988

% of first quarter 1983



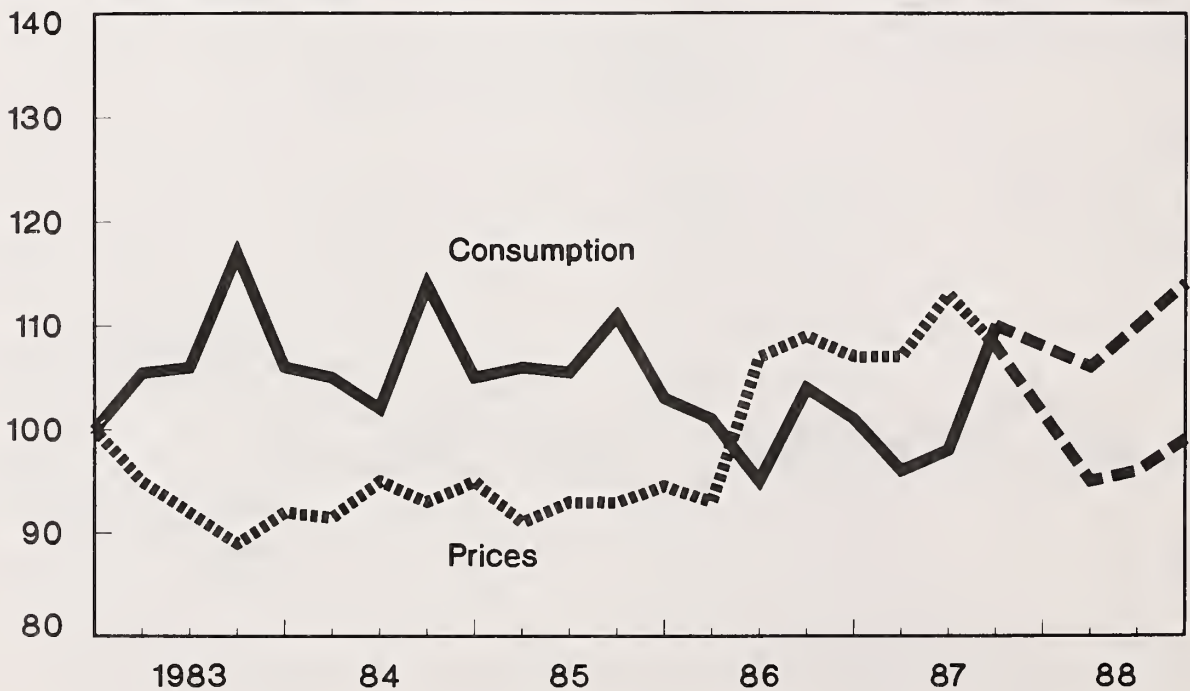
## Pork Consumption and Prices through 1987

% of first quarter 1983



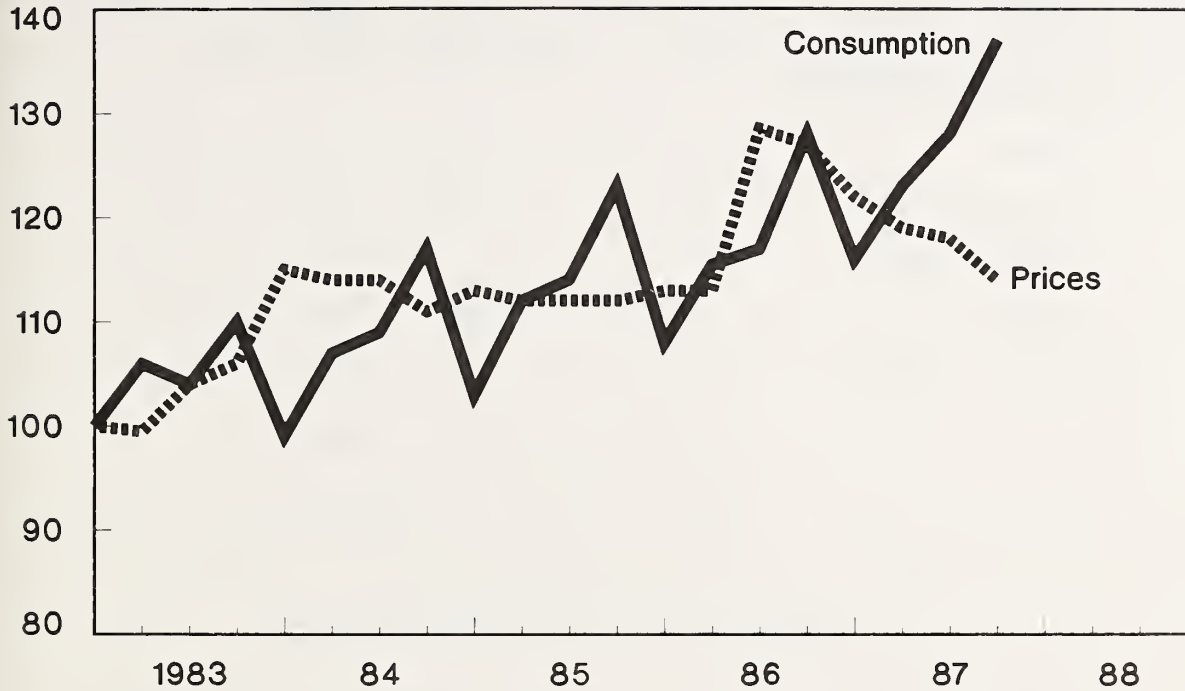
## Pork Consumption and Prices through 1988

% of first quarter 1983



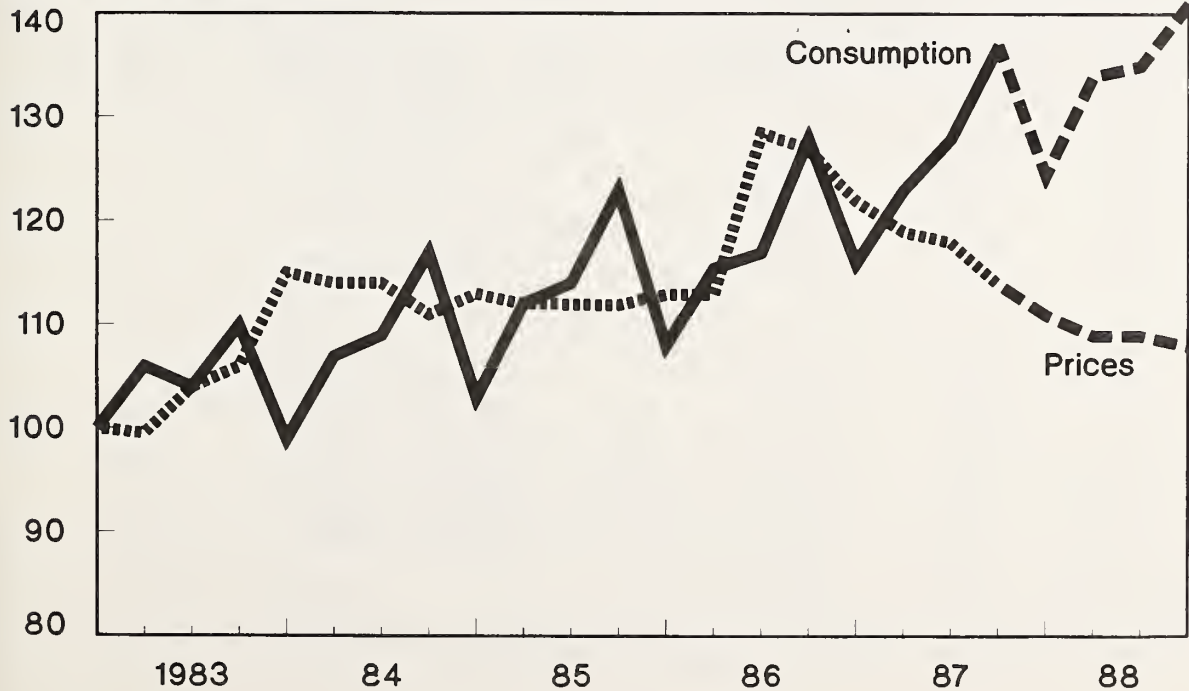
## Poultry Consumption and Prices through 1987

% of first quarter 1983



## Poultry Consumption and Prices through 1988

% of first quarter 1983



## Price Changes for Major Food Marketing Inputs

Category	1985	1986	1987P	1988 F
Average change from previous year				
Food Marketing Costs	1	-1	2	2 to 4
Labor	0	-1	2	1 to 3
Packaging	0	2	4	3 to 5
Transportation	1	0	-2	1 to 3
Energy	-2	-16	-3	2 to 4

P = Preliminary    F = Forecast

## Selected Food Price Indicators

CPI	1985	1986	1987	1988
Percent change				
Food	2.3	3.2	4.1	2 to 4
Food at home	1.4	2.9	4.1	2 to 4
Food away from home	4.0	3.9	4.2	3 to 5



**Farm Production Expenses**

Item	1985	1986	1987F	1988 F
Percent change from a year earlier				
Farm origin items	-7.4	-5.2	3	3
Manufactured inputs	-3.2	-18.2	-8	4
Interest charges	-11.5	-9.5	-14	-5
Repairs, labor, machine hire	.2	-1.4	3	3
Other items <sup>1</sup>	-7.0	-9.3	-5	-1
Total expenses	-6.3	-8.7	-4	1
Cash expenses	-5.8	-8.7	-3	2

F= Forecast.

1/ Includes depreciation, taxes, net rent, and others.

**Cash Receipts**

	1985/86 average	1987F	1988 F
Crops <sup>1</sup>	63.6	58	62
Food grains	5.9	5	6
Feed grains & hay	17.8	11	13
Oil crops	10.8	10	11
Fruit & vegetables	15.6	17	16
Other crops	13.7	15	16
Livestock	71.5	74	71
Meat animals	39.1	43	41
Poultry & eggs	12.7	12	11
Dairy products	17.8	18	17
Other livestock	1.9	2	2
Total	135	132	130 -134

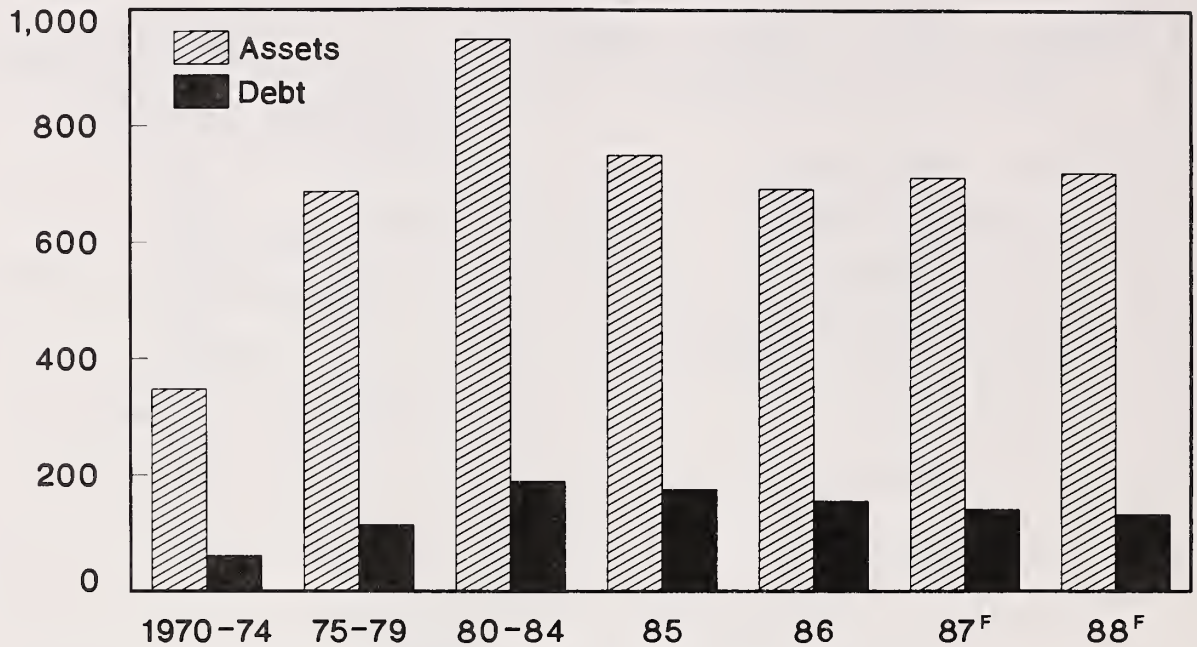
F=Forecast.

1/ Includes net CCC loans.

Totals may not add due to rounding.

## Farm Sector Debt and Assets

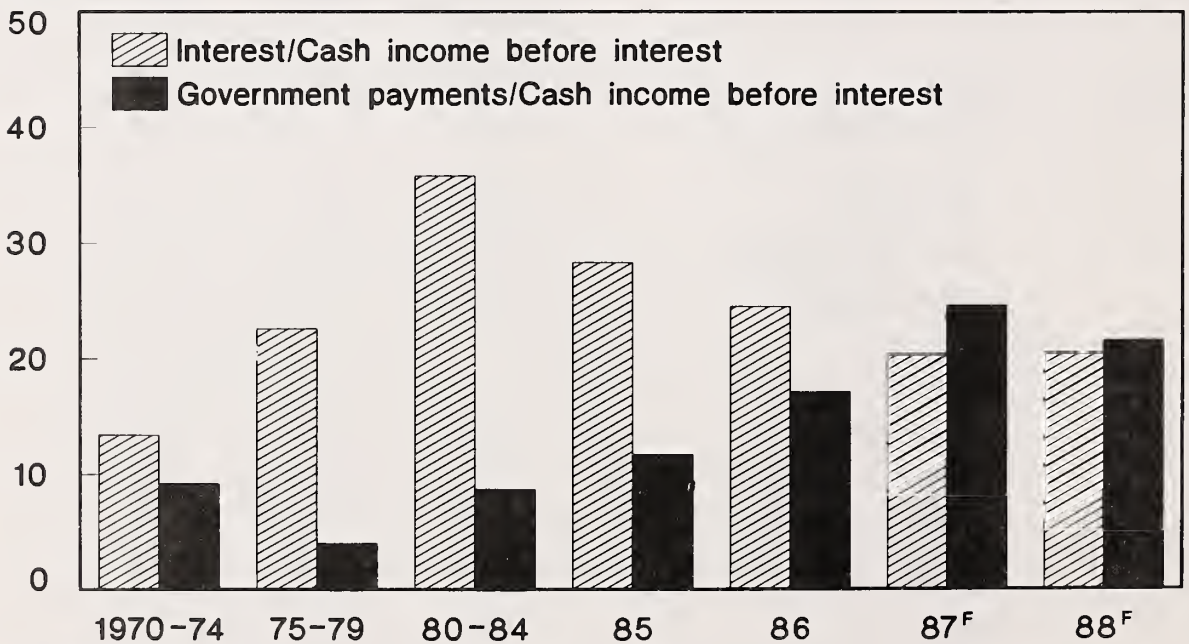
\$ million



F = Forecast. Excludes operator households.

## Trends in Interest and Direct Government Payments

Percent



F = Forecast.

## Balance Sheet of the Farming Sector<sup>1</sup>

Year	Current dollars		Deflated income (\$1982) <sup>2</sup>		
	Assets	Liabilities	Assets	Liabilities	Equity
	Billion dollars		Billion dollars		
1975-79	691.8	116.8	1005.0	169.7	835.3
1980-84	959.7	192.8	973.1	195.5	777.6
1985-86	720.7	165.1	638.9	146.4	492.6
1987F	712	141	607	120	487
1988 F	715	130	593	108	485
1988 F	705-720	125-135	585-600	100-115	480-495

F=Forecast. 1/ Excludes operator households. 2/ Deflated by the GNP implicit price deflator, 1982.

## Returns to Assets and Equity

Year	Returns to assets			Returns to equity		
	Income	Real capital gains	Total	Income	Real capital gains	Total
	Percent			Percent		
1974-79	2.7	7.7	10.4	1.5	9.3	10.7
1980-84	2.0	-5.2	-3.2	-.1	-5.1	-5.2
1985-86	4.8	-5.9	-1.1	3.4	-5.9	-2.5
1987F	5.4	0.0	5.5	4.4	0.0	4.4
1988 F	4.9	-3.0	1.9	3.6	-3.0	.6

F=Forecast. Excludes operator households. Totals may not add due to rounding.

## Farm Sector Income

Year	Current income			Deflated income (\$1982) <sup>1</sup>		
	Net cash	Net farm	Off-farm	Net cash	Net farm	Off-farm
	Billion dollars			Billion dollars		
1975-79	30.8	23.6	28.0	45.4	34.9	41.2
1980-84	36.2	22.2	36.4	36.9	22.6	37.6
1985-86	--	--	--	--	--	--
1987F	57	45	47	49	39	40
1988F	50-55	40-45	48-50	41-45	34-38	41-44

F = Forecast.

1/ Deflated by the GNP implicit price deflator, 1982=100.

## Current and Constant Dollar Commodity Prices

Price / Years	Corn (bu.)	Wheat (bu.)	Soybeans (bu.)	Cotton (lb.)	Cattle (lb.)	Hogs (lb.)
Dollars per unit						
Current:						
Avg. price, 1973-76	2.57	3.55	6.01	.51	.36	.41
Avg. price, 1983-86	2.57	3.20	6.01	.58	.55	.48
Estimated price, 1987 <sup>1</sup>	1.55	2.50	4.89	.60	.61	.52
Ratio						
Ratio of average prices <sup>2</sup> :						
1983-86/1973-76	.52	.47	.52	.59	.79	.61
Constant						
1987/1973-76	.34	.39	.46	.67	.94	.72
Constant						

1/ 11 month average (Jan. - Nov.).

2/ Not official USDA estimates.



## Federal Reserve Bank Surveys of Land Values

	1986		1987		
	3rd quarter	4th quarter	1st quarter	2nd quarter	3rd quarter
Percent					
Chicago	-4.0	-1.4	.4	1.8	3.3
Dallas <sup>1</sup>	-4.5	-2.1	-1.9	-1.0	-2.3
Kansas City	-2.9	-4.1	.5	2.2	2.0
Richmond	.3	-2.3	.9	1.6	9.4
Minneapolis	-4.4	-4.7	2.7	4.5	-2.8

1/ Values generally represent non-irrigated cropland.

Three-quarter moving average.

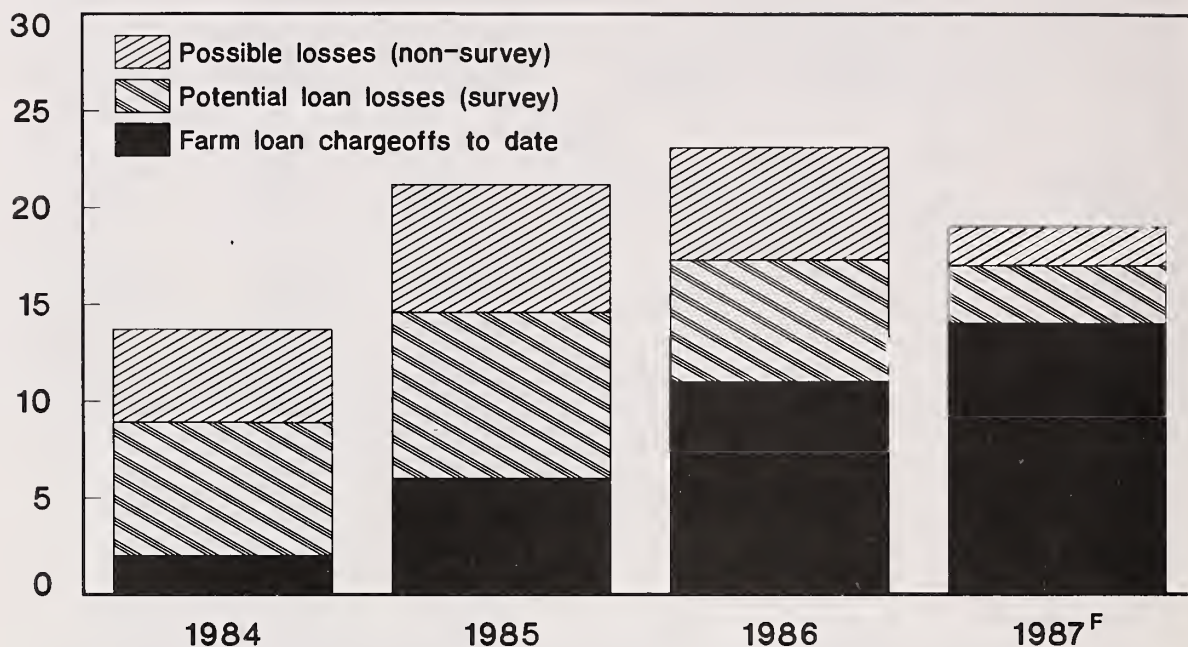
## Potential Loan Losses for Selected State Groups

	Farms with potential loan losses		Incidence of stress*	
	1985	1987	1985	1987
<b>Improvement</b>				
Mountain States	7,800	5,900	16	14
CA, OR, WA	6,000	4,200	16	10
NJ, NY, PA	4,600	2,900	11	8
KS, NE, ND, SD	21,100	15,400	19	16
IL, IN, MI, OH	17,400	12,500	16	13
<b>Stabilization</b>				
IA, MN, WI, MO	37,000	36,000	21	22
<b>Deterioration</b>				
AR, LA, OK, TX	12,600	14,400	16	22
AL, GA, MS, NC	8,800	7,600	18	21
<b>Above regions</b>	<b>108,200</b>	<b>93,600</b>	<b>18.4</b>	<b>17</b>
<b>United States</b>	<b>122,500</b>	<b>104,100</b>	<b>17.0</b>	<b>16</b>

\* Share of farms with potential loan losses.

## Estimated and Potential Loan Losses

\$ billion



F = Forecast.

## Share of Commercial Farms and Commercial Farm Debt That Is Financially Stressed\*

Approach	Commercial farms			Commercial farm debt		
	1984	1985	1986	1984	1985	1986
Percent						
Net cash household income/Solvency	19	17	16	42	37	35
Net cash farm income/Solvency	11	10	9	27	23	20
Net farm income/Solvency	--	--	13	--	--	30
Returns, equity, and solvency	17	14	12	33	26	21
Debt service and solvency	17	16	16	39	35	33

\* Identified by alternative approaches.

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